

UCD LIBRARY



STATE OF CALIFORNIA
The Resources Agency

MAR 14 1974

MAY 21 REC'D

MAR 11 (REC'D)

Department of Water Resources

BULLETIN No. 130-69

HYDROLOGIC DATA: 1969

Volume III: CENTRAL COASTAL AREA

UNIVERSITY OF CALIFORNIA
DAVIS
JUN 1 1971
LIBRARY

MARCH 1971

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources

STATE OF CALIFORNIA
The Resources Agency

Department of Water Resources

BULLETIN No. 130-69

HYDROLOGIC DATA: 1969

Volume III: CENTRAL COASTAL AREA

Copies of this bulletin at \$3.50 each may be ordered from:

State of California
DOCUMENTS SECTION
P.O. Box 20191
Sacramento, California 95820

Make checks payable to STATE OF CALIFORNIA.
California residents add 5 percent sales tax.

MARCH 1971

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

WILLIAM R. GIANELLI
Director
Department of Water Resources



BULLETIN No. 130
HYDROLOGIC DATA
AREAL COVERAGE OF VOLUMES

Each Volume Contains

- Appendix A: Climatological Data
- Appendix B: Surface Water Measurements
- Appendix C: Ground Water Measurements
- Appendix D: Surface Water Quality
- Appendix E: Ground Water Quality



FOREWORD

The data collection programs of the Department of Water Resources have been designed to supplement the activities of other agencies to satisfy specific needs of the State. Bulletin No. 130-69 presents useful, comprehensive, accurate, and timely hydrologic data which are prerequisites for effective planning, design, construction, and operation of water facilities.

The Bulletin No. 130 series is published annually in five volumes. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map to the left.

William R. Gianelli.

William R. Gianelli, Director
Department of Water Resources
The Resources Agency
State of California

January 21, 1971

METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT
1 Inch (in)	2.54 Centimeters
1 Foot (ft)	0.3048 Meters
1 Mile (mi)	1.609 Kilometers
1 Acre	0.405 Hectares
1 Square mile (sq.mi.)	2.590 Square kilometers
1 U. S. gallon (gal)	3.785 Liters
1 Acre-foot (ac.ft.)	1,233.5 Cubic meters
1 U. S. gallon per minute (gpm)	0.0631 Liters per second
1 Cubic foot per second (cfs)	1.7 Cubic meters per minute
1 Part per million (ppm)	1 Milligram per liter (mg/l)
1 Part per billion (ppb)	1 Microgram per liter (ug/l)
1 Part per trillion (ppt)	1 Nanogram per liter (ng/l)
1 Equivalent per million (epm)	1 Milliequivalent per liter (me/l)
Degrees Fahrenheit (°F)	5/9 (°F-32) Degrees Celsius (°C)

TABLE OF CONTENTS

	<u>Page</u>
AREAL COVERAGE OF VOLUMES	ii
FOREWORD	iii
METRIC CONVERSION TABLE	iv
ACKNOWLEDGMENTS	viii
ORGANIZATION	ix
ABSTRACT	x
APPENDIXES	

Appendix A: CLIMATOLOGICAL DATA

Introduction	3
------------------------	---

Figure
Number

FIGURES

A-1	Climatological Observation Stations 1968-69	4
-----	---	---

Table
Number

TABLES

A-1	Index of Climatological Stations for 1968-69	7
A-2	Precipitation Data	12
A-3	Evaporation Data	17

Appendix B: SURFACE WATER MEASUREMENTS

Introduction	21
------------------------	----

Table
Number

TABLES

B-1	Surface Water Imports to the Central Coastal Area	22
B-2	Daily Mean Gage Height, Rector Reservoir near Yountville	23
B-3	Daily Maximum and Minimum Tides	24
B-4	Corrections and Revisions to Previously Published Reports of Surface Water Data	26

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Appendix C: GROUND WATER MEASUREMENTS	
Introduction	29
Index to Ground Water Measurement Data	30

<u>Figure Number</u>	FIGURES		
C-1	Ground Water Basins in the Central Coastal Area		31
C-2	Average Depth to Water in Wells, Spring 1958 to Spring 1969		36

<u>Table Number</u>	TABLES		
C-1	Average Change of Ground Water Levels and Summary of Well Measurements Reported		34
C-2	Ground Water Levels at Wells		42

Appendix D: SURFACE WATER QUALITY	
Introduction	57

<u>Figure Number</u>	FIGURES		
D-1	Surface Water Observation Stations		58
D-2	Maximum, Minimum and Average Daily Specific Conductance, Alameda Creek near Niles		64

<u>Table Number</u>	TABLES		
D-1	Sampling Station Data and Index		62
D-2	Mineral Analyses of Surface Water		65
D-3	Miscellaneous Constituents in Surface Water		88
D-4	Salinity Observations at Bay and Delta Stations		95
D-5	Nutrients in Surface Water		98
D-6	Pesticides in Surface Water and Sediment		104
D-7	Plankton Analysis of Surface Water		106

TABLE OF CONTENTS (Continued)

Page

Appendix E: GROUND WATER QUALITY

Introduction	109
Index to Ground Water Quality Data	110

Table
Number

TABLES

E-1	Mineral Analyses of Ground Water	111
E-2	Trace Element Analyses of Ground Water	125
E-3	Miscellaneous Constituents in Ground Water	126

Appendix F: WASTE WATER

Introduction	129
------------------------	-----

Figure
Number

FIGURES

F-1	Location of Waste Dischargers	130
-----	---	-----

Table
Number

TABLES

F-1	Quantity of Waste Water Discharged and Reused	132
F-2	Analyses of Waste Water	134

ACKNOWLEDGMENTS

In the preparation of this report, valuable assistance and contributions were received from many public and private agencies. This cooperation is gratefully acknowledged. Special mention is made of the following agencies:

Federal

U. S. Army Corps of Engineers
U. S. Army, Post Engineer, Fort Ord
U. S. Bureau of Reclamation
U. S. Coast Guard
U. S. Geological Survey
U. S. Soil Conservation Service
U. S. Weather Bureau

State

Department of Public Health
Department of Veterans Affairs
Division of Highways
Division of Forestry
University of California,
Agricultural Extension Service
North Coastal Water Quality
Control Board
San Francisco Bay Regional Water
Quality Control Board
Central Coastal Regional Water
Quality Control Board
State Water Resources Control Board

Local

Alameda County Flood Control and
Water Conservation District
Alameda County Water District
Marin County
Mendocino County
Monterey County Flood Control and
Water Conservation District
Napa County
San Benito County
San Luis Obispo County Flood Control
and Water Conservation District
Santa Clara County Flood Control and
Water District
Santa Clara Valley Water Conservation
District
Santa Cruz County, Department of Public
Works
Solano Irrigation District
Sonoma County Flood Control and Water
Conservation District
South Santa Clara Valley Water
Conservation District

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

RONALD REAGAN, Governor, State of California
NORMAN B. LIVERMORE, Jr., Secretary for Resources
WILLIAM R. GIANELLI, Director, Department of Water Resources
JOHN R. TEERINK, Deputy Director

This report was prepared in the

CENTRAL DISTRICT

John M. Haley District Engineer
Vernon Bengal Chief, Water Resources Evaluation Section
Edward J. Labrie Chief, Ground Water Unit
Glenn R. Peterson Chief, Surface Water Unit

assisted by

Grant C. Ardell Water Resources Engineering Associate
Jan C. Bush Water Resources Engineering Associate
Joseph L. Clause Water Resources Engineering Associate
Emil M. Padjen Water Resources Engineering Associate

A portion of the data was furnished by the

SAN JOAQUIN DISTRICT

Carl L. Stetson District Engineer
Floyd I. Bluhm Chief, Engineering Services Section
Richard W. Meffley Chief, Special Investigations Section
Cledith L. Chastain Chief, Hydraulic Unit
Victor B. McIntyre Chief, Water Quality Unit

And by the

NORTHERN DISTRICT

Gordon W. Dukleth District Engineer
Wayne S. Gentry Chief, Operations Section
Robert F. Middleton, Jr. Chief, Hydrologic Data Unit

Reviewed and coordinated by
Division of Resources Development
Environmental Quality Branch
Water Resources Evaluation Section

ABSTRACT

Report contains tables showing data on climate, surface water flow, ground water levels, surface and ground water quality, and waste water in the Central Coastal Area for the 1968-69 water year. Figures show the location of climatological observation stations and ground water basins; the average depth to water in wells; the location of surface water measurement and surface water quality stations; the daily mean specific conductance of Alameda Creek near Niles; the location of waste dischargers; and major drainage and hydrographic unit boundaries.

Appendix A

CLIMATOLOGICAL DATA

INTRODUCTION

This appendix summarizes monthly precipitation, wind movement, and evaporation data for the Central Coastal Area from July 1, 1968, to September 30, 1969. Seventeen cooperating agencies and 25 local observers supplied the data. Detailed daily and hourly data not published here are available in the files of the Department of Water Resources.

To insure accuracy, stations are inspected regularly to see that the equipment is properly maintained and that the observations generally are taken in accordance with U. S. Weather Bureau standards.

Each station in this appendix has been assigned an identification number. The letter and first digit denote the drainage basin as shown below. The remaining digits denote the sequence of the station in alphabetical order.

Central Coastal Area

D0 Santa Cruz Coast
D1 Pajaro-San Benito Rivers
D2 Lower Salinas River
D3 Upper Salinas River
D4 Monterey Coast
T9 Upper Salinas River

San Francisco Bay Area

E0 San Francisco Bay
E1 Coast-Marin
E2 Marin-Sonoma
E3 Napa-Solano
E4 East Bay
E5 Alameda Creek
E6 Santa Clara Valley
E7 Bayside-San Mateo
E8 Coast-San Mateo

North Coastal Area

F8 Mendocino Coast
F9 Russian River

LEGEND

TYPE OF DATA

- ● ○ PRECIPITATION ONLY
- ⊙ PRECIPITATION, STORAGE
- ⊖ ● ⊖ PRECIPITATION AND TEMPERATURE
- ⊕ ● ⊕ PRECIPITATION, TEMPERATURE AND EVAPORATION

TYPE OF GAGE

- NON-RECORDING
- RECORDING
- ⊙ BOTH TYPES

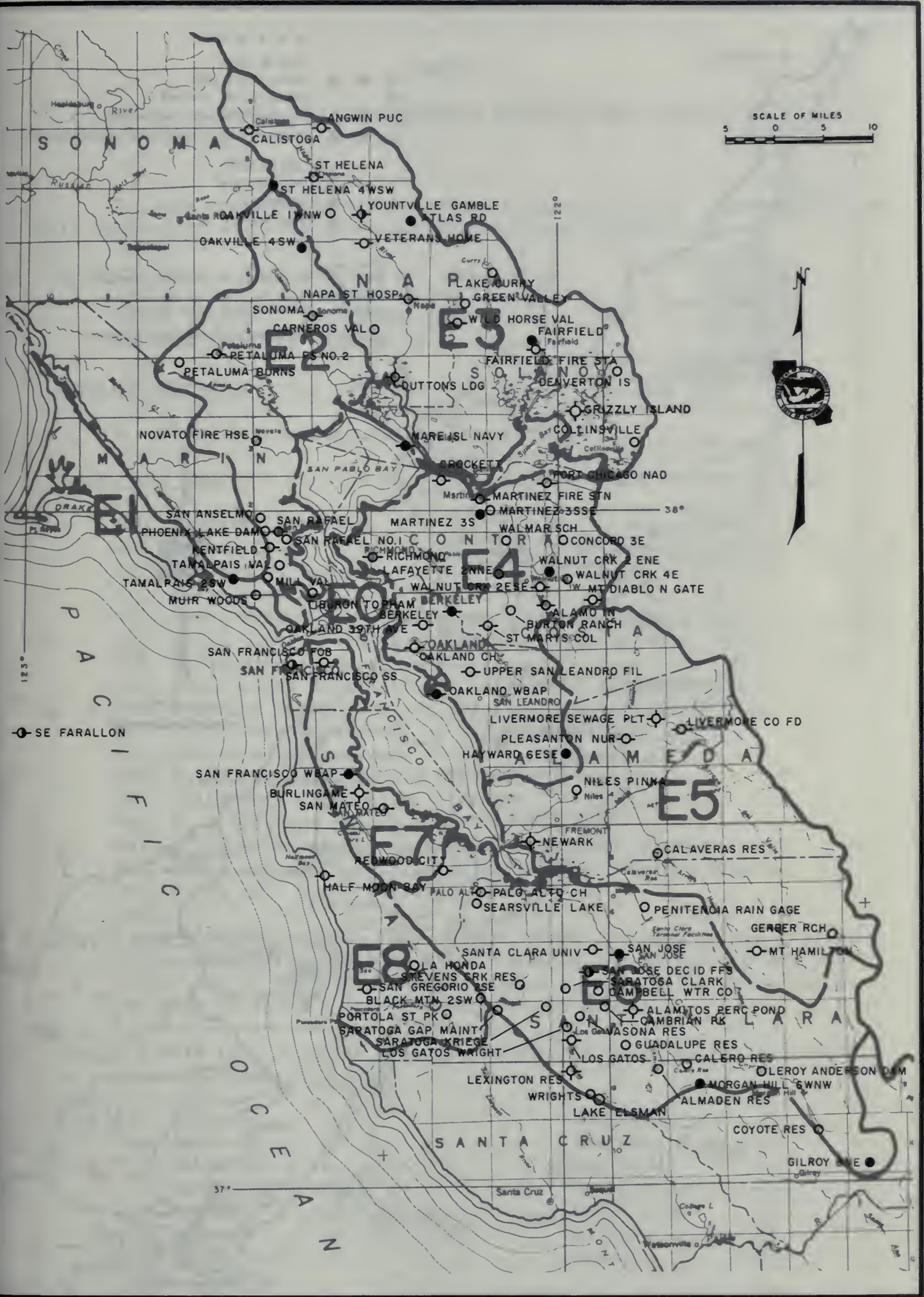
E2 HYDROGRAPHIC SUB-AREA NUMBER

— HYDROGRAPHIC AREA BOUNDARY

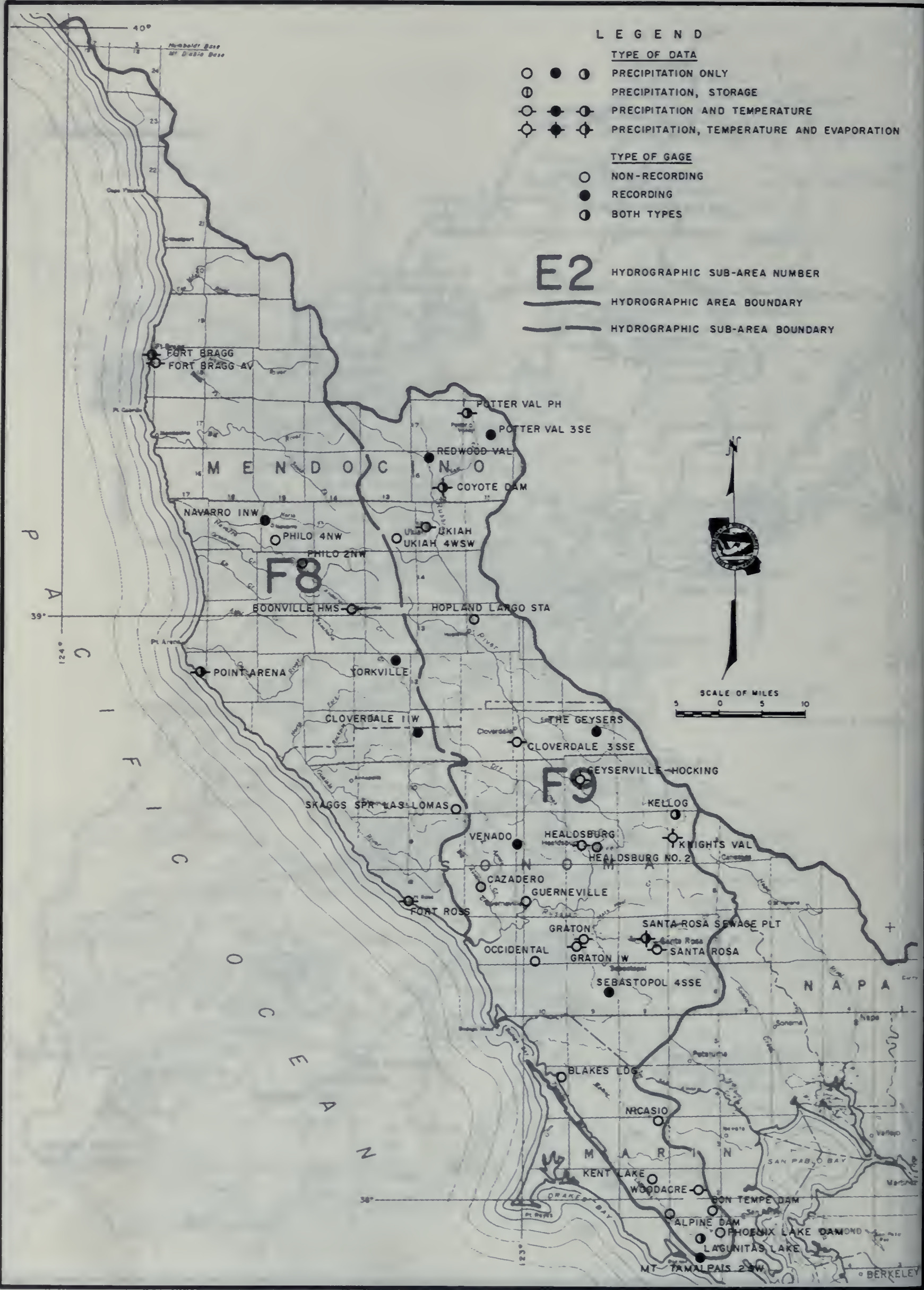
- - - HYDROGRAPHIC SUB-AREA BOUNDARY



CLIMATOLOGICAL OBSERVATION STATIONS 1968-69



CLIMATOLOGICAL OBSERVATION STATIONS 1968 - 69



CLIMATOLOGICAL OBSERVATION STATIONS 1968-69

TABLE A-1

INDEX OF CLIMATOLOGICAL STATIONS FOR 1968-69

An explanation of the column headings and the code symbols used in connection with the climatological station listing follows:

40-Acre Tract - This denotes the location of the station within the section in which it is located. The letter code is derived from the diagram to the right.

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Base and Meridian - The code for this column is as follows:

M - Mount Diablo Base and Meridian

Cooperator Number - This number is assigned from the following list:

- 000 Private Cooperator
- 403 Sonoma County Flood Control and Water Conservation District
- 407 San Benito County
- 411 Marin County
- 413 Marin Municipal Water District
- 414 Santa Clara Valley Water Conservation District
- 418 Vallejo Water Department
- 426 Santa Clara County Flood Control and Water District
- 801 Pomology Department, University of California, Davis
- 804 California Department of Beaches and Parks
- 806 California Department of Water Resources
- 808 California Division of Forestry
- 809 California Division of Highways
- 900 U. S. Weather Bureau
- 901 U. S. Corps of Engineers, San Francisco District
- 907 State Climatologist (unpublished U. S. Weather Bureau)
- 909 U. S. Soil Conservation Service

Cooperator's Index Number - This is the number assigned to the station by the agency responsible for or handling the records of the station. The U. S. Weather Bureau number is only shown in this column when it differs from the alpha order number.

County - This is a standard code for California counties and adjacent areas as shown below:

Alameda	60	San Francisco	80
Contra Costa	07	San Luis Obispo	40
Marin	21	San Mateo	41
Mendocino	23	Santa Clara	43
Monterey	27	Santa Cruz	44
Napa	28	Solano	48
San Benito	35	Sonoma	49

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS FOR 1968-69

Station		Elevation (In Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian		Latitude			Longitude			Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
Number	Name						O	M	O	I	II	O	I	II						
E6 0053	ALAMITOS PERCOLATION POND	185	SEC 09	T08S	R01E	F	M	37	15	18	121	52	18	414		1959			43	
E4 0064	ALAMO 1 N	410	SEC 12	T01S	R02W	C	M	37	52	00	122	02	00	900		1957			07	
E6 0125	ALMADEN RESERVOIR	640	SEC 11	T09S	R01E	E	M	37	10	00	121	50	00	414		1936			43	
F9 0135	ALPINE DAM	680	SEC 10	T01N	R07W	R	M	37	56	30	122	38	18	413		1925			21	
E3 0212	ANGWIN PACIFIC UNION COL	1815	SEC 05	T08N	R05W	K	M	38	34	17	122	26	05	900		1939			28	
D2 0322	ARROYO SECO	800	SEC 36	T19S	R04E		M	36	14	00	121	29	00	900		1931			27	
T9 0360-01	ATASCADERO MAINT STATION	940	SEC 26	T28S	R12E	R	M	35	27	30	120	38	24	809	L145	1948			40	
E3 0372	ATLAS ROAD	1660	SEC 25	T07N	R04W	G	M	38	25	36	122	14	53	900		1940			28	
D0 0677	BEN LOMOND NO. 3	720	SEC 10	T10S	R01W		M	37	05	00	122	04	00	900		1967			44	
E4 0693	BERKELEY	299		T01S	R03W		M	37	52	00	122	15	00	900		1887			60	
D4 0790	BIG SUR STATE PARK	235	SEC 30	T19S	R02E		M	36	15	00	121	47	00	900		1914			27	
E6 0850	BLACK MOUNTAIN 2 SW	2331	SEC 36	T07S	R03W		M	37	18	00	122	10	00	900		1943			43	
F9 0876	BLAKES LANDING	40	SEC 13	T04N	R01W	L	M	38	11	42	122	55	00	000		1956			21	
F9 0969	BON TEMPE DAM	723	SEC 11	T01N	R07W	D	M	37	57	24	122	36	36	413		1958			21	
F8 0973	BOONVILLE H M S	342	SEC 02	T13N	R14W	F	M	39	00	54	123	22	20	900	PN0971	1936			23	
D0 1005	BOULDER CREEK LOCATELLI RCH	2175	SEC 16	T09S	R03W	Q	M	37	08	32	122	11	43	900		1943			44	
D3 1034	BRADLEY	540	SEC 08	T24S	R11E		M	35	52	00	120	48	00	900		1946			27	
D3 1142	BRYSON	925	SEC 34	T24S	R08E		M	35	48	00	121	05	00	900		1946			27	
D1 1170	BUENA VISTA	1640	SEC 27	T13S	R07E	R	M	36	46	00	121	11	00	900		1932			35	
E7 1206	BURLINGAME	10		T04S	R05W		M	37	35	00	122	21	00	900		1946			41	
E4 1216	BURTON RANCH	530	SEC 09	T01S	R02W		M	37	52	00	122	05	00	900		1955			07	
D1 1247	BUZZARD LAGOON	1275	SEC 26	T10S	R01E	M	M	37	02	00	121	50	00	000		1959			44	
E5 1281	CALAVERAS RESERVOIR	805	SEC 24	T05S	R01E		M	37	29	12	121	49	06	900		1874			60	
E6 1285	CALERO RESERVOIR	500	SEC 04	T09S	R02E	E	M	37	10	48	121	45	48	414		1958			43	
E3 1312	CALISTOGA	364	SEC 36	T09N	R07W	K	M	38	35	05	122	34	59	900		1873			28	
E6 1341-10	CAMBRIAN PARK	24	SEC 12	T08S	R01W	C	M	37	15	12	121	55	24	426					43	
E6 1377-01	CAMPBELL WATER COMPANY	192	SEC 35	T01S	R01W	C	M	37	17	00	121	57	00	000		1897	09		43	
D4 1534	CARMEL VALLEY	425	SEC 03	T17S	R02E		M	36	29	00	121	44	00	900		1957			27	
E3 1537	CARNEROS VALLEY	300	SEC 13	T05N	R05W	G	M	38	17	00	121	21	30	901		1931			28	
F9 1602	CAZADERO	1040	SEC 13	T08N	R12W	R	M	38	31	48	123	07	31	900		1939			49	
D1 1739	CHITTENDEN PASS	125	SEC 12	T12S	R03E		M	36	54	00	121	36	00	900		1945			44	
D1 1739-01	CHITTENDEN	104	SEC 11	T12S	R03E	K	M	36	54	08	121	36	17	909		1960			44	
T9 1743	CHOLAME ALLEY RANCH	1975	SEC 12	T26S	R16E		M	35	41	00	120	12	00	900		1925			40	
D1 1766	CIENEGA	900	SEC 18	T14S	R06E	B	M	36	42	54	121	20	48	407		1950			35	
F9 1838	CLOVERDALE 3 SSE	320	SEC 29	T11N	R01W		M	38	46	00	122	59	00	900		1950			49	
F8 1840	CLOVERDALE 11 W	1820	SEC 17	T11N	R12W		M	38	46	00	123	13	00	900		1939			49	
E3 1919	COLLINSVILLE	34	SEC 22	T03N	R01E	F	M	38	05	26	121	51	17	000		1946			48	
E4 1962	CONCORD 3 E	200		T01N	R01W		M	37	58	00	121	59	00	900		1954			07	
D0 2048	CORRALITOS	260	SEC 12	T11S	R01E		M	36	59	00	121	48	00	900		1958			44	
F9 2105	COYOTE DAM	720	SEC 34	T16N	R12W	E	M	39	12	00	123	11	00	901		1960			23	
E6 2109	COYOTE RESERVOIR	800	SEC 09	T10S	R04E	C	M	37	05	06	121	32	24	414		1938			43	
D0 2159	CREST RANCH	2640	SEC 06	T10S	R02W	N	M	37	05	06	122	08	00	000		1948			44	
E4 2177	CROCKETT	12	SEC 32	T03N	R03W		M	38	02	00	122	13	00	900		1918			07	
D0 2290	DAVENPORT	273	SEC 32	T10S	R03W	Q	M	37	01	00	122	12	00	900		1910			44	
D2 2362	DEL MONTE	46		T15S	R01E		M	36	36	00	121	52	00	900		1911			27	
E3 2399-48	DENVERTON 1 S	22	SEC 08	T04N	R01E	F	M	38	12	23	121	53	28	000		1950			48	
E3 2580	DUTTONS LANDING	20	SEC 09	T04N	R04W	R	M	38	12	07	122	18	11	900		1955			28	
E3 2933	FAIRFIELD	13	SEC 25	T05N	R02W	M	M	38	15	01	122	02	25	900		1940			48	
E3 2934	FAIRFIELD FIRE STATION	34	SEC 24	T05N	R02W	N	M	38	15	36	122	02	26	900		1951			48	
F8 3161	FORT BRAGG	80	SEC 06	T18N	R17W	N	M	39	26	45	123	48	24	900		1895			23	
F8 3164	FORT BRAGG AVIATION	74	SEC 25	T18N	R18W	K	M	39	23	34	123	48	51	900		1940			23	
D2 3186	FORT ORD	134					M	36	41	00	121	46	00	900					27	
F8 3191	FORT ROSS	116	SEC 30	T08N	R12W	D	M	38	31	00	123	15	00	900		1874			49	
D1 3232	FREEDOM 8 NNW	1495	SEC 24	T10S	R01E		M	37	03	00	121	49	00	900		1952			44	
D1 3238	FREMONT PEAK	2500	SEC 35	T13S	R04E	F	M	36	45	36	121	29	54	000		1950			35	
E5 3387	GERBER RANCH	2140	SEC 36	T06S	R04E	P	M	37	22	00	121	29	12	900		1912			43	
F9 3395-07	GEYSERVILLE HOCKING	200	SEC 18	T10N	R09W	J	M	38	43	00	122	53	30	806		1965	1969		49	
D1 3417	GILROY	194	SEC 06	T11S	R04E		M	37	00	00	121	34	00	900		1957			43	
E6 3419	GILROY 8 NE	1050	SEC 29	T10S	R05E		M	37	02	00	121	27	00	900		1942			43	
D1 3422	GILROY 14 ENE	1350	SEC 05	T10S	R06E		M	37	06	00	121	20	00	900		1940			43	
D2 3502	GONZALES 9 ENE	2350	SEC 15	T16S	R06E		M	36	33	00	121	18	00	900		1943			35	
F9 3577	GRATON	200	SEC 21	T07N	R09W	P	M	38	25	51	122	51	49	000		1928			49	
F9 3578	GRATON 1 W	210		T07N	R09W		M	38	26	00	122	53	00	900		1896	1968		49	
D2 3591	GREENFIELD BAKER	280		T18S	R07E		M	36	19	24	121	14	36	901		1958			27	
E3 3612-01	GREEN VALLEY	414	SEC 14	T05N	R03W	D	M	38	17	00	122	10	00	418		1893		18	48	
E3 3651-48	GRIZZLY ISLAND	1	SEC 33	T04N	R01W	A	M	38	09	15	121	58	26	805		1968			48	
E6 3681	GUADALUPE RESERVOIR	450	SEC 29	T08S	R01E	Q	M	37	12	00	121	53	00	414		1936			43	
F9 3683	GUERNEVILLE	145	SEC 29	T08N	R10W	P	M	38	30	15	122	59	40	900		1939			49	
E8 3714	HALF MOON BAY	60	SEC 29	T05S	R05W	P	M	37	27	41	122	26	01	900		1965			41	
D2 3722	HAMES VALLEY	725	SEC 32	T23S	R10E		M							000		1963			27	

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS FOR 1968-69

Station		Elevation (In Feet)	Section	Township	Range	40-Acre Tract Base & Meridian	Latitude			Longitude			Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
Number	Name						O	I	II	O	I	II						
E4 3863	HAYWARD 6 ESE	715	SEC 21	T03S	R01W	N M	37	39	08	121	59	09	900		1940			60
F9 3875	HEALDSBURG	101	SEC 19	T09N	R09W	M	38	37	00	122	50	00	900		1877			49
F9 3878	HEALDSBURG NO. 2	102		T09N	R09W	M	38	37	00	122	50	00	900		1943			49
D1 3925	HERNANDEZ 2 NW	2160	SEC 29	T17S	R10E	M	36	25	00	120	55	00	900		1940			35
D1 3928	HERNANDEZ 7 SE	2765	SEC 06	T19S	R12E	M	36	18	00	120	42	00	900		1940			35
D1 4022	HOLLISTER 1 SW	279		T13S	R05E	M	36	50	00	121	25	00	900		1874			35
D1 4025	HOLLISTER 2	284	SEC 10	T12S	R05E	M	36	51	00	121	24	00	900		1938			35
D1 4035	HOLLISTER 10 ENE	2578	SEC 08	T12S	R07E	M	36	55	00	121	14	00	900		1962			35
F9 4100	HOPLAND LARGO STATION	550		T13N	R12W	M	39	01	00	123	07	00	900		1948	1968		23
F9 4480	KELLOGG	1800	SEC 09	T09N	R07W	M	38	40	00	122	40	00	900		1936			49
E2 4500	KENTFIELD	80	SEC 08	T01N	R06W	Q M	37	56	47	122	33	02	900		1888			21
F9 4502	KENT LAKE	360	SEC 25	T02N	R08W	D M	37	59	54	122	42	30	413		1954			21
D2 4555	KING CITY	320	SEC 08	T20S	R08E	M	36	12	00	121	08	00	900		1887			27
F9 4593	KNIGHTS VALLEY	480	SEC 18	T09N	R07W	M	38	37	00	122	40	00	900		1964	1969		49
E4 4633	LAFAYETTE 2 NNE	540		T01N	R02W	M	37	55	00	122	06	00	900		1956			07
F9 4652	LAGUNITAS LAKE	785	SEC 12	T01N	R07W	M M	37	56	48	122	35	42	413		1881			21
E8 4660	LA HONDA	670	SEC 14	T07S	R04W	M	37	19	00	122	16	00	900		1950			41
E3 4677	LAKE CURRY	386	SEC 19	T06N	R02W	B M	38	21	18	122	07	18	418		1926	09		28
E6	LAKE ELSMAN	1145	SEC 23	T09S	R01W	J M	37	07	56	121	55	47	426		1951			43
T9 4767	LA PANZA RANCH	1550	SEC 20	T29S	R17E	M	35	23	00	120	10	00	900		1948			40
E6 4916	LEROY ANDERSON DAM	700	SEC 10	T09S	R03E	K M	37	09	48	121	37	48	414		1950			43
E6 4922	LEXINGTON RESERVOIR	700	SEC 05	T09S	R01W	J M	37	10	36	121	59	18	414		1951			43
T9 4963	LINN RANCH	870	SEC 07	T26S	R12E	F M	35	41	06	120	43	24	000		1925	1968		40
E5 4997	LIVERMORE SEWAGE PLANT	405	SEC 12	T03S	R01E	A M	37	41	28	121	48	20	000		1961			60
E5 4997	LIVERMORE COUNTY F D	490	SEC 17	T03S	R02E	M	37	40	00	121	46	00	900		1966			60
D3 5017	LOCKWOOD 2 N	1104	SEC 34	T22S	R08E	M	35	58	00	121	05	00	900		1940			27
E6 5123	LOS GATOS	428		T08S	R01W	M	37	13	00	121	59	00	900		1885			43
E6 5123-04	LOS GATOS WRIGHT	1610	SEC 26	T09S	R01W	H M	37	07	24	121	56	00	000		1947	1968		43
D0 5125	LOS GATOS 4 SW	2215	SEC 01	T09S	R02W	M	37	11	00	122	02	00	900		1957			43
D4 5184	LUCIA WILLOW SPRINGS	360	SEC 05	T24S	R05E	M	35	53	00	121	27	00	900		1941			27
E3 5333	MARE ISLAND NAVY	52		T03N	R03W	M	38	06	00	122	16	12	900		1867			48
E4 5371	MARTINEZ 3 S	225		T02N	R02W	M	37	58	00	122	08	00	900		1941			07
E4 5372	MARTINEZ 3 SSE	280		T02N	R02W	M	37	58	00	122	06	00	900		1956			07
E4 5377	MARTINEZ FIRE STATION	26		T02N	R02W	M	38	01	00	122	08	00	900		1891			07
E2 5647	MILL VALLEY	10	SEC 33	T01N	R06W	B M	37	53	48	122	31	36	411		1944			21
D2 5795	MONTEREY	335		T15S	R01E	M	36	36	00	121	54	00	900		1878			27
D2 5799	MONTEREY N A L F	162				M	36	36	00	121	52	00	900					
D1 5844	MORGAN HILL 2 E	225		T09S	R03E	M	37	08	00	121	37	00	900		1943			43
E6 5846	MORGAN HILL 6 WSW	660		T09S	R02E	M	37	09	00	121	46	00	900					43
D1 5853	MORGAN HILL S C S	350	SEC 20	T09S	R03E	M	37	08	00	121	39	00	900		1945			43
E4 5915	MOUNT DIABLO NORTH GATE	2070	SEC 02	T01S	R01W	R M	37	52	07	121	56	05	900		1952			07
E5 5933	MOUNT HAMILTON	4206		T07S	R03E	M	37	20	00	121	39	00	900		1881			43
D1 5973	MOUNT MADONNA	1800	SEC 35	T10S	R02E	M	37	01	00	121	43	00	900		1945			44
D1 5973-11	MOUNT MADONNA COUNTY PARK	1880	SEC 01	T11S	R02E	B M	37	00	42	121	42	12	909		1937			43
F9 5996	MOUNT TAMALPAIS 2 SW	1480		T01N	R07W	M	37	54	00	122	36	00	900		1959			21
E1 6027	MUIR WOODS	170				M	37	54	00	122	34	00	900		1940			21
T9 6056	NACIMIENTO DAM	770	SEC 15	T25S	R10E	M	35	46	00	120	53	00	900		1957			40
E3 6074	NAPA STATE HOSPITAL	73	SEC 14	T05N	R04W	J M	38	16	40	122	15	50	900		1877			28
F8 6105	NAVARRO 1 NW	220	SEC 18	T15N	R15W	M	39	09	50	123	33	47	900		1958			23
E5 6144	NEWARK	14	SEC 01	T05S	R02W	Q M	37	31	18	122	01	43	900		3891			60
F9 6187	NICASIO	200	SEC 28	T03N	R08W	C M	38	05	00	122	45	00	413					21
E5 6199-10	NILES PINNA	75	SEC 21	T04S	R01W	B M	37	34	00	121	58	00	000		1962			60
F9 6290	NOVATO 8 WNW	350	SEC 24	T04N	R08W	M	38	08	00	122	43	00	900		1943			21
E2 6290-02	NOVATO FIRE HOUSE	18	SEC 18	T03N	R06W	E M	38	06	30	122	33	42	411		1957			21
E4 6332-01	OAKLAND 39TH AVENUE		SEC 04	T02S	R03W	B M	37	47	30	122	11	37	907		1960			60
E4 6333	OAKLAND CITY HALL	40	SEC 35	T01S	R04W	C M	37	48	00	122	16	00	900		1949			60
E4 6335	OAKLAND WB AIRPORT	3		T02S	R03W	M	37	44	00	122	12	00	900		1939			60
E3 6351	OAKVILLE 1 WNW	165	SEC 21	T07N	R05W	G M	38	26	46	122	25	07	900		1906			28
E2 6356	OAKVILLE 4 SW NO. 2	1685	SEC 01	T06N	R06W	A M	38	23	55	122	27	54	900		1963			28
F9 6370	OCCIDENTAL	960	SEC 34	T07N	R10W	D M	38	24	46	122	57	43	900		1940			49
D1 6610	PAICINES OHRWALL RANCH	950	SEC 12	T14S	R05E	M	36	44	00	121	22	00	900		1924			35
E6 6646	PALO ALTO CITY HALL	43	SEC 01	T06S	R03W	B M	37	26	43	122	08	22	900		1953			43
D2 6650	PALOMA	1835	SEC 23	T18S	R04E	M	36	21	00	121	30	00	900		1940			27
D3 6703	PARKFIELD	1482	SEC 35	T23S	R14E	M	35	53	00	120	26	00	900		1938			27
D3 6706	PARKFIELD 7 NNW	3590	SEC 21	T22S	R14E	N M	36	59	46	120	28	26	900		1948	1969		27
T9 6730	PASO ROBLES	700	SEC 33	T26S	R12E	M	35	38	00	120	41	00	900		1887			40
T9 6736	PASO ROBLES 5 NW	1040	SEC 11	T26S	R11E	M	35	41	00	120	45	00	900		1940			40
T9 6742	PASO ROBLES FAA AIRPORT	803	SEC 13	T26S	R12E	M	35	40	00	120	38	00	900		1944			40
E6 6791-43	PENITENCIA RAIN GAGE	255	SEC 23	T06S	R01E	L M	37	24	00	121	49	54	426					43
E2 6826	PETALUMA FIRE STATION NO. 2	16	SEC 33	T05N	R07W	A M	38	14	28	122	37	44	900		1871			49

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS FOR 1968-69

Station		Elevation (In Feet)	Section	Township	Range	40-Acre Tract	Base & Meridian	Latitude			Longitude			Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
Number	Name							O	I	II	O	I	II						
E2 6826-01	PETALUMA BURNS	240	SEC 02	T04N	R08W	F	M	38	13	00	122	42	48	901		1959		49	
F8 6851-01	PHILO 2 NW	240		T14N	R15W		M	39	05	30	123	28	30	000		1953		23	
F8 6851-02	PHILO 4 NW	240	SEC 33	T15N	R15W		M	39	01	00	123	37	00	403				23	
F9 6853	PHOENIX LAKE DAM	175	SEC 12	T01N	R07W	M	M	37	57	18	122	34	24	413		1937		21	
D2 6926	PINNACLES NATIONAL MONUMENT	1310	SEC 02	T17S	R07E		M	36	29	00	121	11	00	900		1937		35	
E5 6991-05	PLEASANTON NURSERY	345	SEC 20	T03S	R01E	C	M	37	40	00	122	53	00	000		1939		60	
F8 7009	POINT ARENA	122	SEC 12	T12N	R17W		M	38	55	00	123	42	00	900		1940		23	
E4 7070	PORT CHICAGO N A D	50		T02N	R01W		M	38	01	00	122	01	00	900		1946		07	
E8 7086	POTOLA STATE PARK	422	SEC 08	T08S	R03W		Q	M	37	14	42	122	12	42	901		1959		41
F9 7108	POTTER VALLEY 3 SE	1100	SEC 27	T17N	R11W		M	39	18	00	123	04	00	900		1952		23	
F9 7109	POTTER VALLEY POWERHOUSE	1014	SEC 06	T17N	R11W		M	39	22	00	123	08	00	900		1911		23	
D2 7150	PRIEST VALLEY	2300	SEC 17	T20S	R12E		M	36	11	00	120	42	00	900		1898		27	
D1 7190	QUIEN SABE HAY CAMP	1630	SEC 27	T12S	R07E	M	M	36	51	30	121	11	48	000		1949		35	
D1 7249	RANCHO QUIEN SABE	1800	SEC 04	T13S	R07E	D	M	36	50	12	121	12	48	000		1931		35	
E6 7339	REDWOOD CITY	31		T05S	R03W		M	37	29	00	122	14	00	900		1899		41	
F9 7351	REDWOOD VALLEY	718	SEC 09	T16N	R12W		M	39	16	00	123	12	00	900		1937		23	
E4 7414	RICHMOND	55					M	37	56	00	122	21	00	900		1950		07	
D4 7539-01	ROOSEVELT RANCH	1100	SEC 24	T20S	R02E	F	M	36	10	48	121	41	48	000		1946		27	
E3 7643	SAINTE HELENA	225	SEC 31	T08N	R05W	C	M	38	30	25	122	27	40	900		1907		28	
E3 7646	SAINTE HELENA 4 WSW	1792	SEC 04	T07N	R06W		M	38	30	00	122	32	00	900		1939		21	
E4 7661	SAINTE MARYS COLLEGE	625	SEC 17	T01S	R02W		M	37	50	00	122	06	00	900		1942		07	
D2 7668	SALINAS 2 E	80		T14S	R03E		M	36	40	00	121	37	00	900		1958		27	
D2 7669	SALINAS FAA AIRPORT	80		T14S	R03E		M	36	40	00	121	36	00	900		1873		27	
T9 7672	SALINAS DAM	1380	SEC 08	T30S	R14E		M	35	20	00	120	30	00	900		1942		40	
E2 7707-01	SAN ANSELMO	100	SEC 31	T02N	R06W	L	M	37	58	36	122	33	42	411		1957		21	
D3 7714	SAN ANTONIO MISSION	1060	SEC 18	T22S	R07E		M	36	01	00	121	15	00	900		1959		27	
D2 7716	SAN ARDO	440	SEC 09	T22S	R10E		M	36	02	00	120	54	00	900		1894		27	
D1 7719	SAN BENITO	1355	SEC 27	T16S	R08E	H	M	36	30	30	121	04	54	900		1936		35	
D4 7731	SAN CLEMENTE DAM	600	SEC 23	T17S	R02E		M	36	26	12	121	42	30	900	NPGS18	1940		27	
D1 7755	SAN FELIPE HIGHWAY STATION	365	SEC 32	T10S	R06E		M	37	01	00	121	20	00	900		1943		43	
E8 7767	SAN FRANCISCO SUNSET	300		T02S	R06W		M	37	46	00	122	30	00	900		1948		80	
E7 7769	SAN FRANCISCO WB AIRPORT	8		T04S	R05W		M	37	37	00	122	23	00	900		1928		41	
E7 7772	SAN FRANCISCO F O B	52		T02S	R05W		M	37	47	00	122	25	00	900		1931		80	
E8 7807	SAN GREGORIO 2 SE	245	SEC 23	T07S	R05W		Q	M	37	18	14	122	21	38	900		1964		41
E6 7821	SAN JOSE	70		T07S	R01E		M	37	21	00	121	54	00	900		1874		43	
E6 7824-01	SAN JOSE DECID F F S	90	SEC 15	T07S	R01W	J	M	37	19	00	121	57	00	801		1935		43	
D1 7834	SAN JUAN BAUTISTA 3 SSE	615	SEC 10	T13S	R04E		M	36	49	00	121	31	00	900		1943		35	
D1 7835	SAN JUAN BAUTISTA MISSION	200		T12S	R04E		M	36	50	42	121	32	00	804		1900	02	35	
E7 7864	SAN MATEO	30	SEC 29	T04S	R04W		M	37	34	00	122	19	00	900		1874		41	
E2 7880	SAN RAFAEL	31			R06W		M	37	58	00	122	32	00	900		1948		21	
E2 7880-08	SAN RAFAEL NO. 1	25	SEC 34	T02N	R06W	R	M	37	58	24	122	31	30	413		1876		21	
E6 7912	SANTA CLARA UNIVERSITY	88	SEC 02	T07S	R01W	P	M	37	20	52	121	56	27	900		1881		43	
D0 7916	SANTA CRUZ	125		T11S	R01W		M	36	59	00	122	01	00	900		1866		44	
T9 7930	SANTA MARGARITA 2 SW	1200	SEC 36	T29S	R12E		M	35	22	00	120	38	00	900		1940		40	
T9 7933	SANTA MARGARITA BSTR	1100	SEC 25	T29S	R12E		M	35	22	00	120	38	00	900		1931	03	40	
F9 7964	SANTA ROSA SEWAGE PLANT	20	SEC 21	T07N	R08W	P	M	38	26	24	122	45	12	000		1956		49	
F9 7965	SANTA ROSA	167		T07N	R08W		M	38	27	00	122	42	00	900		1888		49	
E6 7998-01	SARATOGA CLARK	272	SEC 32	T07S	R01W	F	M	37	16	48	121	59	42	414		1956		43	
E6 7998-02	SARATOGA GAP MAINT STATION	2600	SEC 06	T08S	R02W	Q	M	37	16	06	122	07	18	809				43	
E6 7998-03	SARATOGA KRIEGE	290	SEC 12	T08S	R02W	F	M	37	15	00	122	02	00	426		1960		43	
E6 8068	SEARSVILLE LAKE	350	SEC 12	T06S	R03W		M	37	24	00	122	14	00	900		1949		41	
F9 8072	SEBASTOPOL 4 SSE	145	SEC 24	T06N	R09W	E	M	38	21	06	122	48	42	900		1935		49	
F8 8272	SKAGGS SPRING LAS LOMAS	1930	SEC 36	T10N	R12W	B	M	38	40	38	123	08	04	900		1939		49	
D2 8276	SLACK CANYON	1730	SEC 22	T21S	R12E	M	M	36	05	00	120	40	00	900		1955		27	
D2 8338	SOLEDAD	204		T17S	R06E		M	36	26	00	121	19	00	900		1874		27	
D2 8338-01	SOLEDAD C T F	230	SEC 12	T17S	R05E	B	M	36	28	26	121	22	34	806		1961		27	
E2 8351	SONOMA	20		T05N	R05W		M	38	17	00	122	27	00	900		1952		49	
E0 8376	S E FARALLON	27					M	37	42	00	123	00	00	900		1941		80	
D2 8446	SPRECKELS HIGHWAY BRIDGE	60		T15S	R03E		M	36	36	00	121	41	00	900		1905		27	
D2 8446-01	SPRECKELS	55	SEC 16	T15S	R03E		M	36	37	14	121	39	27	000		1905		27	
E6 8519	STEVENS CREEK RESERVOIR	600	SEC 28	T07S	R02W	H	M	37	18	00	122	05	00	414		1937		43	
D0 8680	SUNSET BEACH STATE PARK	85		T12S	R01E		M	36	54	00	121	50	00	900		1956		44	
E2 8779	TAMALPAIS VALLEY	250	SEC 05	T01N	R06W	B	M	37	52	42	122	32	36	901		1959		21	
T9 8849	TEMPLETON	773	SEC 29	T27S	R12E		M	35	32	54	120	42	20	000		1886	05	40	
F9 8885	THE GEYSERS	1668	SEC 14	T11N	R09W	C	M	38	48	02	122	49	32	900		1939		49	
E2 8920-21	TIBURON TOPHAM	400	SEC 06	T01S	R05W	K	M	37	52	24	122	27	12	000		1960		21	
F9 9122	UKIAH	623	SEC 17	T15N	R12W		M	39	09	00	123	12	00	900		1877		23	
F9 9124	UKIAH 4 WSW	1900		T15N	R12W		M	39	08	00	123	17	00	900		1951		23	
E4 9185	UPPER SAN LEANDRO FIL	390	SEC 11	T02S	R03W	G	M	37	46	00	122	10	00	900		1944		07	
D1 9189	UPPER TRES PINOS	2050	SEC 07	T15S	R09E		M	36	38	00	121	02	00	900		1940		35	

TABLE A-1 (Cont.)
INDEX OF CLIMATOLOGICAL STATIONS FOR 1968-69

Station		Elevation (In Feet)	Section	Township	Range	40-Acre Tract Base & Meridian	Latitude			Longitude			Cooperator Number	Cooperator's Index Number	Record Began	Record Ended	Years Missing	County Code
Number	Name						O	I	II	O	I	II						
D3 9221	VALLETON	950	SEC 32	T23S	R12E	M	35	53	00	120	42	00	900		1940			27
E6 9270	VASONA RESERVOIR	300	SEC 10	T08S	R01W	M	37	14	36	121	58	00	426					43
F9 9273	VENADO	1260	SEC 19	T09N	R10W	M	38	37	00	123	01	00	900		1939			49
E3 9305	VETERANS HOME	170	SEC 01	T06N	R05W	M	38	23	00	122	22	00	000		1912			28
E4 9420	WALMAR SCHOOL	128				M	37	57	00	122	05	00	900		1954			07
E4 9423	WALNUT CREEK 2 ESE	245	SEC 36	T01N	R02W	M	37	53	00	122	02	00	900		1887			07
E4 9426	WALNUT CREEK 2 ENE	220	SEC 30	T01N	R02W	M	37	54	00	122	01	00	900		1944			07
E4 9427	WALNUT CREEK 4 E	265	SEC 29	T01N	R01W	G	37	54	23	121	59	40	900		1954			07
D1 9473	WATSONVILLE WATERWORKS	95	SEC 32	T11S	R02E	M	36	56	00	121	46	00	900		1880			44
DO 9675	WILDER RANCH	50	SEC 21	T11S	R02W	E	36	57	36	122	05	24	000		1924	1968		44
E3 9675-41	WILD HORSE VALLEY	1240	SEC 10	T05N	R03W	D	38	17	53	122	11	13	418					48
F9 9770	WOODACRE	430	SEC 21	T02N	R07W	G	38	00	24	122	38	30	808	049770	1950			21
E6 9814	WRIGHTS	1600	SEC 23	T09S	R01W	M	37	08	00	121	57	00	900		1918			43
F8 9851	YORKVILLE	1120	SEC 08	T12N	R12W	M	38	54	18	123	18	46	900		1939			23
E3 9861	YOUNTVILLE GAMBLE	120	SEC 24	T07N	R05W	P	38	26	05	122	22	05	806		1962	1968		28

TABLE A-2
PRECIPITATION DATA

The definition of terms and abbreviations used in connection with this table are as follows:

- No record or record incomplete.
- * Amount included in the following measurement. Time distribution unknown.
- E Wholly or partially estimated.
- T Trace, an amount too small to measure.
- V Includes total from previous month.
- RB Record began.
- RE Record ended.

Precipitation values are shown to the nearest hundredth (.01) of an inch, except where Fischer & Porter recording rain gages are used, these values are shown to the nearest tenth (.1) of an inch.

TABLE A-2 (Cont.)
PRECIPITATION DATA

Precipitation in Inches

Station Name	Total July 1 to June 30	1968									1969						Total Oct. 1 to Sept. 30	
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
CENTRAL COASTAL AREA																		
SANTA CRUZ DO																		
BEN LOMOND NO. 3	68.47	T	0.49	T	2.24	4.38	10.32	25.78	19.37	1.97	3.92	T	T	0	0	0.08	68.06	
BOULDER CREEK LOCATELLI RC	95.78	0	0.92	0	3.71	6.19	17.08	35.53	23.81	3.04	4.72	0.12	0.66	0	0	0.07	94.93	
CORRALITOS	46.6	0	0.7	0	0.8	3.5	8.5	15.6	12.9	1.3	3.1	0.2	0	0.2	0	0	46.1	
CREST RANCH	95.13	0	0.93	T	2.96	5.75	15.75	36.64	22.88	4.60	4.83	0.30	0.49	-	-	-	-	
DAVENPORT	40.09	0	0.44	0.08	1.17	4.25	8.14	10.18	11.43	2.02	2.10	0	0.28	0	0.03	0.02	39.62	
LOS GATOS 4 SW	72.53	0	0.30	0	2.58	4.09	12.85	27.45	18.12	2.42	4.22	T	0.50	0	0	0	72.23	
SANTA CRUZ	45.42	T	0.55	0	1.50	4.31	7.27	14.80	12.01	1.99	2.87	0.08	0.04	0	0	0.07	44.94	
SUNSET BEACH STATE PARK	33.3	0	0.2	0	0.6	3.5	4.1	10.2	10.3	0.9	3.5	0	0	0	0.1	0.1	33.3	
WILDER RANCH	-	0	0.47	0	RE													
PAJARO-SAN BENITO RIVERS D1																		
BUENA VISTA	21.43	0	0.05	0	0.79	1.94	2.77	6.89	6.29	0.92	1.78	0	0	0	0	0.16	21.54	
BUZZARD LAGOON	51.06	0	0.16	0	1.47	3.80	7.42	20.58	15.07	0.52	2.04	0	0	0	0	0	50.90	
CHITTENDEN PASS	30.54	0	0.19	0	0.79	2.67	3.74	11.99	7.21	2.03	1.92	0	0	0	0	0.15	30.50	
CHITTENDEN	33.54	0	0.16	0	0.98	2.52	3.71	11.87	10.28	2.19	1.83	0	T	0	0	0.15	33.53	
CIENEGA	29.42	0	0	0	0.74	1.86	4.19	10.44	8.33	2.11	1.75	0	0	0	0	0.24	29.66	
FREEDOM 8 NNW	54.74	0	0.52	0	1.34	3.86	7.84	21.78	15.11	1.00	3.21	0	0.08	0	0	0.02	54.24	
FREMONT PEAK	37.69	T	0.73	0	1.01	3.24	5.80	13.56	8.31	1.38	2.95	0.05	0.66	0	0	0.19	37.15	
GILROY	31.97	0	0.02	0	0.72	2.39	4.28	13.33	7.88	1.62	1.72	0	0.01	0	0	0.13	32.08	
GILROY 14 ENE	34.94	0	0.08	0	0.41	2.33	4.58	14.73	9.24	1.74	1.83	0	T	0	0	0.59	35.45	
HERNANDEZ 2 NW	27.97	0	T	0	1.22	2.36	3.03	9.10	9.20	0.52	2.54	0	0	0	0	1.06	29.03	
HERNANDEZ 7 SE	35.58	0	0	0	1.38	2.00	3.90	15.04	10.39	0.29	2.55	0.03	0	0	0	0.97	36.55	
HOLLISTER 1 SW	19.44	0	0	0	0.28	1.74	2.38	7.57	5.29	0.83	1.32	0.01	0.02	0	0	0.18	19.62	
HOLLISTER 2	-	0	0	0	0.5	-	-	7.3	5.6	0.5	1.4	0	0	0	0	0.2	-	
HOLLISTER 10 ENE	-	0	0.41	0	1.05	2.80	3.91	-	-	-	2.75	0	0.35	0	0	-	-	
MORGAN HILL 2E	34.40	0	0.39	0	0.47	2.42	4.34	14.32	9.85	0.56	2.01	0.01	0.03	0	0	0.11	34.12	
MORGAN HILL SCS	37.3	0	0.1	0	0.6	2.2	4.7	16.0	11.1	0.6	2.0	0	0	0	0	0.1	37.3	
MOUNT MADONNA	46.99	0	0.64	0	1.26	3.45	6.11	18.05	12.62	1.19	3.62	0	0.05	0	0	0.04	46.39	
MOUNT MADONNA COUNTY PARK	41.00	0.03	0.54	0.10	0.80	3.32	5.00	15.65	9.73	2.18	3.09	0.16	0.40	0.05	0	0.14	40.52	
PAICINES OHRMALL RANCH	24.23	0	0	0	0.75	1.57	3.18	8.71	6.54	1.72	1.76	0	0	0	0	0	24.23	
QUIEN SABE HAY CAMP	26.52	T	0.22	0	0.72	2.41	4.17	8.29	6.70	1.55	2.24	0	0.22	0	T	0.45	26.75	
RANCHO QUIEN SABE	25.36	0	0.25	0	0.87	2.30	4.02	6.69	7.94	1.24	1.92	0	0.13	0	0	0	25.11	
SAN BENITO	21.41	0	0.13	0	1.02	1.89	2.08	7.31	7.16	0.40	1.42	0	0	0	0	0.50	21.78	
SAN FELIPE HIGHWAY STATION	27.25	0	0.15	0	0.45	2.20	3.21	10.59	7.89	0.49	1.62	0	0.25	0	0	0.36	27.46	
SAN JUAN BAUTISTA 3 SSE	26.36	0	0.10	0	0.49	2.22	4.28	9.64	6.64	1.29	1.70	0	0	0	0	0.11	26.37	
SAN JUAN BAUTISTA MISSION	-	T	0.02	0	0.74	2.43	4.01	11.86	6.09	-	-	-	-	-	-	-	-	
UPPER TRES PINOS	21.23	0	0	0	0.75	1.81	2.05	7.13	7.64	0.63	1.22	0	0	0	0	0.74	21.97	
WATSONVILLE WATERWORKS	32.39	0	0.22	0.01	0.60	3.35	4.74	10.93	8.53	1.62	2.39	0	T	0	0	0.09	32.25	
LOWER SALINAS RIVER D2																		
ARROYO SECO	40.93	0	0	0	0.83	2.09	3.95	20.16	11.63	0.35	1.92	0	0	0	0	0.24	41.17	
DEL MONTE	19.02	0	0.08	0	0.41	2.37	1.55	6.44	5.11	0.88	2.09	0	0.09	0	0	0.11	19.05	
FORT ORD	24.87	T	0.11	T	0.11	2.63	3.10	7.68	7.93	0.88	2.32	0.07	0.04	T	T	0.09	24.85	
GONZALES 9 ENE	21.31	0	0	0	0.67	1.87	2.49	6.00	7.37	1.22	1.67	0	0.02	0	0	0.02	21.33	
GREENFIELD BAKER	15.80	0	0	0	0.90	1.29	1.72	5.37	4.84	0.47	1.21	0	0	0	0	0.14	15.94	
HAMES VALLEY	31.13	0	T	0	2.03	1.68	2.99	14.30	7.98	0.25	1.90	0	0	0	0	0.30	31.43	
KING CITY	17.04	0	T	0	0.13	1.46	1.91	6.77	5.42	0.23	1.12	0	0	0	0	0.35	17.39	
MONTEREY	28.36	0.06	0.23	0.05	0.31	3.13	3.27	9.45	7.31	1.31	2.70	0.12	0.42	0.04	T	T	0.12	28.18
MONTEREY N A L F	23.17	0.01	0.06	0.01	0.26	2.00	2.52	8.10	6.67	0.86	2.50	0.03	0.15	T	T	0.10	23.19	
PALOMA	39.99	T	0.06	0	0.54	2.04	5.00	15.06	13.27	0.97	2.55	0.31	0.19	0	T	0.05	39.98	
PINNACLES NATL MONUMENT	24.38	0.02	T	0	1.03	2.01	2.38	7.33	9.43	0.75	1.43	0	0	0	0	0.19	24.55	
PRIEST VALLEY	39.98	0	T	0	1.59	2.25	4.26	16.89	10.74	0.86	3.37	0.02	0	0	0	0.48	40.46	
SALINAS 2E	23.36	0	0.06	0	0.29	1.96	3.28	8.53	6.24	1.21	1.76	0	0.03	0	0	0	23.30	
SALINAS FAA AIRPORT	21.14	T	0.08	T	0.28	1.76	2.75	7.93	5.75	1.07	1.50	T	0.02	T	T	0.03	21.09	
SAN ARDO	28.70	0	T	0	1.45	1.65	2.82	12.33	8.22	0.28	1.95	0	0	0	0	0.40	29.10	
SLACK CANYON	30.33	0	T	0	1.77	1.90	2.88	12.62	7.90	0.80	2.34	0	0.12	0	0	0.40	30.73	
SOLEDAD	18.14	T	T	0	0.60	1.38	2.05	5.97	6.02	0.64	1.48	0	0	0	0	0.25	18.39	
SOLEDAD C T F	15.45	0	0	0	0.52	1.12	1.81	4.74	5.29	0.72	1.25	0	0	0	0	0.12	15.57	
SPRECKELS HIGHWAY BRIDGE	24.29	T	0.05	0.01	0.36	1.88	2.73	9.10	6.48	1.55	2.03	0.01	0.09	0.01	0	0.25	24.49	
SPRECKELS	22.88	0	0.05	0	0.27	1.85	2.82	9.00	6.16	0.88	1.70	0.10	0.05	T	0	0	22.83	
UPPER SALINAS RIVER D3																		
BRADLEY	-	-	-	-	-	2.13	-	11.20	6.86	0.40	2.07	0	0	0	0	0.22	-	
BRYSON	50.54	0	0	0	1.53	1.81	5.22	24.91	13.83	0.24	3.00	0	0	0	0	0.13	50.67	
LOCKWOOD 2 N	26.54	0	0	0	1.54	1.67	2.93	11.97	6.47	0.24	1.72	0	0	0	0	0.18	26.72	
PARKFIELD	32.40	0	0	0	1.71	1.93	3.86	12.84	9.35	1.00	1.71	0	0	0	0	0.06	32.46	
PARKFIELD 7 NNW	-	0	0.06	0	1.68	1.46	2.42	9.67	-	-	1.42	0	RE	-	-	-	-	
SAN ANTONIO MISSION	35.54	0	0	0	1.76	2.03	4.00	15.36	10.10	0.20	2.09	0	0	0	0	0.54	36.08	
VALLETON	26.86	0	0	0	1.48	1.58	2.38	11.34	7.39	0.17	2.52	0	0	0	0	0.20	27.06	
MONTEREY COAST D4																		
BIG SUR STATE PARK	61.30	0	0.21	0	1.80	3.38	8.06	23.50	17.61	2.66	3.90	0.10	0.08	0	0	0.11	61.20	
CARMEL VALLEY	30.47	0.04	0.05	0	0.33	2.00	3.52	12.53	8.64	1.31	1.74	0.13	0.18	0	0	0.02	30.40	
LUCIA WILLOW SPRINGS	48.13	0	0.18	0	1.60	2.33	6.50	21.36	12.51	0.63	3.02	0	0	0	0	0.16	48.11	
ROOSEVELT RANCH	44.99	0	0.26	0	2.51	3.54	5.17	16.51	11.90	1.82	3.11	T	0.17	0	0	0.20	44.93	
SAN CLEMENTE DAM	36.87	0	0.02	0	0.33	1.77	4.24	15.13	11.10	1.92	2.14	0.12	0.10	0	0	0	36.85	

TABLE A-2 (Cont.)
PRECIPITATION DATA

Precipitation in inches																	Total Oct. 1 to Sept. 30
Station Name	Total July 1 to June 30	1968							1969							Total Oct. 1 to Sept. 30	
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.		Sept.
UPPER SALINAS RIVER T9																	
ATASCADERO MAINTENANCE STN	38.42	0	0	0	2.02	1.05	2.89	16.48	12.71	1.35	1.92	0	0	0.40	0	0.05	38.87
CHOLAME ALLEY RANCH	20.66	0	0	0	1.71	1.25	1.21	8.74	6.23	0.21	1.31	0	0	0	0	0.08	20.74
LA PANZA RANCH	20.35	0	0	0	0.95	0.58	1.09	9.16	7.32	0.22	0.98	0	0.05	0	0	0.10	20.45
LENN RANCH	-	0	RE														
NACIMIENTO DAM	31.71	0	0	0	2.22	1.42	2.63	13.98	8.91	0.49	1.99	0	0.07	0	0	0.13	31.84
PASO ROBLES	31.25	0	T	0	1.83	1.14	3.13	13.93	9.12	0.35	1.68	0.06	0.01	0.25	0	T	31.50
PASO ROBLES 5 NW	30.67	0	0	0	1.71	1.00	2.33	13.27	10.14	0.21	2.01	0	0	0	0	0.20	30.87
PASO ROBLES FAA AIRPORT	29.17	0	0	0	2.43	1.16	2.54	12.19	8.82	0.17	1.78	0.03	0.05	0.30	0	0.15	29.62
SALINAS DAM	49.26	T	T	0	1.83	1.55	2.73	21.71	17.29	1.10	3.04	0.01	T	T	0	T	49.26
SANTA MARGARITA 2 SW	55.13	0	T	0	3.22	3.12	5.60	21.67	15.81	1.66	4.01	T	0.04	0	0	0.07	55.20
SANTA MARGARITA BSTR	60.61	T	T	T	2.94	3.06	5.63	26.62	16.64	1.80	3.90	0.01	0.01	T	0	0.06	60.67
TEMPLETON	38.28	0	0	0	2.25	1.14	3.00	17.56	11.85	0.30	2.09	0.09	0	0.58	0	0.10	38.96
SAN FRANCISCO BAY AREA																	
SAN FRANCISCO BAY EO																	
S E FARALLON	21.68	0	0.05	0.04	1.66	3.01	4.38	4.56	5.77	0.91	1.28	0	0.02	0	0	0.06	21.65
COAST-MARIN E1																	
MUIR WOODS	47.67	0	0.63	0.17	2.10	5.87	11.48	11.17	10.49	2.54	2.93	0.18	0.11	0	0	0.06	46.93
MARIN-SONOMA E2																	
KENTFIELD	67.92	0	0.97	0	4.96	6.49	16.15	20.11	13.26	3.23	2.67	0.08	0	0	0	0.03	66.98
MILL VALLEY	42.95	0	0.50	0.10	1.50	5.65	9.85	10.30	10.20	2.40	2.35	0.10	0	0	0	0	42.35
NOVATO FIRE HOUSE	35.66	0	0.25	0	1.31	3.23	7.58	9.86	10.59	1.08	1.76	0	0	0	0	0	35.41
OAKVILLE 4 SW NO. 2	60.83	0	0.31	0.09	4.28	3.38	12.79	20.08	14.75	1.35	3.70	0.04	0.06	0	0	0	60.43
PETALUMA FIRE STN NO. 2	30.86	0	0.62	0.03	1.84	3.20	5.72	7.72	7.57	1.63	2.52	0	0.01	0	0	T	30.21
PETALUMA BURNS	-	0	0.36	0.06	2.28	4.10	10.60	12.73	9.88	1.99	2.47	-	-	0	0	0.01	-
SAN ANSELMO	66.59	0	0.15	0	4.05	4.64	15.16	19.37	18.61	1.80	2.80	0	0.01	0	0	0.02	66.46
SAN RAFAEL	56.43	T	0.32	0	3.25	5.10	14.10	16.49	13.01	1.69	2.45	0.02	T	0	0	0.09	56.20
SAN RAFAEL NO. 1	28.92	T	0.27	T	0.68	2.39	5.77	9.40	6.05	3.95	0.31	0.10	T	0	0	0.09	28.74
SONOMA	34.48	0	0.27	0	1.98	3.15	7.95	8.01	9.09	1.66	2.27	T	0.10	0	0	T	34.21
TAMALPAIS VALLEY	46.14	0	0.56	0.15	1.72	5.78	10.44	11.68	10.66	2.45	2.44	0.18	0.08	0	0	T	45.43
TIBURON TOPHAM	56.15	0	0.37	0	1.42	6.63	15.41	13.08	13.67	3.02	2.55	0	0	0	0	0.10	55.88
NAPA-SOLANO E3																	
ANGWIN FUC	59.16	0	0.97	0.02	3.74	4.00	12.24	21.27	11.13	2.08	3.53	0.09	0.09	T	0	0	58.17
ATLAS ROAD	-	0	1.1	0	3.2	3.7	-	-	12.8	1.3	4.3	0.2	0.2	0	0	0	-
CALISTOGA	51.69	0	0.94	0.07	2.92	3.41	11.56	16.73	10.94	1.91	3.01	0.12	0.08	0	0	0	50.68
CARNEROS VALLEY	40.05	0	0.33	0.20	2.45	3.65	8.23	11.74	9.42	1.64	2.30	T	0.09	0	0	T	39.52
COLLINSVILLE	-	0	0	0	0.17	2.44	2.51	6.27	-	-	-	-	-	-	-	-	-
DENVERTON 1 S	22.98	T	T	0	0.22	3.18	2.55	7.14	7.74	0.76	1.31	0.03	0.05	T	T	T	22.98
DUTTONS LANDING	24.14	0	0.09	0	1.00	3.25	4.81	6.48	5.81	1.50	1.16	0	0.04	0	0	0	24.05
FAIRFIELD	28.02	0	0.98	0	0.66	3.41	4.02	9.10	7.39	0.93	1.38	0	0.15	0	0	0	27.04
FAIRFIELD FIRE STATION	30.06	0	1.18	0	0.75	3.55	4.44	9.80	7.04	1.95	1.25	0	0.10	0	0	0	28.88
GREEN VALLEY	-	0	0.36	0	1.77	3.36	6.48	12.00	9.74	1.35	2.08	-	-	-	-	-	-
GRIZZLY ISLAND	-					RB	3.04	8.34	5.49	1.63	0.97	0.01	0.05	0	0	0	-
LAKE CURRY	-	0	0.33	0	1.79	2.64	5.42	11.31	8.99	0.90	1.91	-	0.19	-	-	-	-
MARE ISLAND NAVY	24.59	0	0.04	T	0.85	3.15	5.06	7.27	5.82	0.69	1.64	0	0.07	0	0	0	24.55
NAPA STATE HOSPITAL	28.17	0	0.25	0	1.62	2.90	4.87	8.30	7.58	1.03	1.59	0	0.03	0	0	0	27.92
OAKVILLE 1 NNW	44.53	0	0.35	T	2.06	3.27	9.74	14.24	11.02	1.37	2.44	T	0.04	0	0	0.01	44.19
SAINT HELENA	50.05	0	0.81	T	2.92	3.68	10.58	17.13	10.82	1.58	2.34	0.08	0.11	T	0	T	49.24
SAINT HELENA 4 WSW	59.5	0	0.8	0.2	4.3	3.7	11.9	20.4	12.3	1.9	3.6	0.2	0.2	0	0	0	58.5
VETERANS HOME	50.25	0	0.53	0	3.20	3.20	10.68	15.65	11.74	2.34	2.86	0.01	0.04	0	0	0	49.72
WILD HORSE VALLEY	-	0	0.43	0	1.99	2.63	6.28	13.07	10.98	1.49	2.89	-	0.06	-	-	-	-
YOUNTVILLE GAMBLE	-	0	0.96	0	3.06	2.85	RE										
EAST BAY E4																	
ALAMO 1 N	30.85	T	0.10	0	0.26	2.48	4.32	11.15	9.13	1.60	1.76	0.04	0.01	0	0	T	30.75
BERKELEY	31.29	0	0.55	0	0.81	2.89	5.13	9.22	8.76	1.44	2.46	0	0.03	0	0	T	30.74
BURTON RANCH	34.87	T	0.14	0	0.50	2.89	5.24	11.58	9.85	2.26	2.30	T	0.11	0	0	T	34.73
CONCORD 3 E	24.26	0	0.02	0	0.20	2.83	3.24	7.28	7.17	1.32	2.12	0.03	0.05	0	0	T	24.24
CROCKETT	24.74	0	0.02	T	0.54	3.24	4.61	7.63	5.67	1.38	1.61	0	0.04	0	0	0	24.72
HAYWARD 6 ESE	33.94	0	0.14	0	0.51	3.50	5.75	10.95	9.05	1.32	2.31	0.04	0.37	0	0	0	33.80
LAFAYETTE 2 NNE	31.94	T	0.13	T	0.67	2.45	4.33	11.64	8.56	1.73	2.34	0.04	0.05	0	0	T	31.81
MARTINEZ 3 S	28.84	0	0.29	0	0.56	2.78	4.49	9.95	8.21	0.77	1.76	0	0.03	0	0	0	28.55
MARTINEZ 3 SSE	25.06	0.02	0.11	0.01	0.49	2.84	4.17	10.14	4.87	1.02	1.38	0.01	T	0	0	T	24.92
MARTINEZ FIRE STN	25.28	0	0.17	0	0.22	3.28	3.63	9.09	6.16	1.09	1.64	0	T	0	0	T	25.11
MOUNT DIABLO NORTH GATE	30.50	0	0.18	0	0.43	3.43	3.98	10.76	7.75	1.68	2.08	0.08	0.13	0	0	0.01	30.33
OAKLAND 39TH AVENUE	32.16	T	0.33	0	0.66	3.23	4.82	9.65	9.67	1.16	2.54	0	0.10	0	0	T	31.83
OAKLAND CITY HALL	20.35	0.01	0.01	T	0.44	1.87	2.84	7.80	5.42	0.50	1.46	0	T	0	0	0	20.33
OAKLAND WB AIRPORT	24.57	T	0.03	T	0.29	2.44	3.21	6.90	8.85	0.98	1.82	T	0.05	T	0	T	24.54
PORT CHICAGO NAD	21.80	0	T	0	0.13	2.49	2.82	7.38	6.75	0.91	1.32	0	T	0	0	0	21.80
RICHMOND	31.49	T	0.13	0	1.07	3.05	5.69	9.39	8.90	1.42	1.79	0.01	0.04	0	0	0.01	31.37
SAINT MARYS COLLEGE	35.95	T	0.30	0	0.74	3.27	5.38	12.25	10.35	1.34	2.27	T	0.05	0	0	0	35.65
UPPER SAN LEANDRO FIL	30.72	T	0.25	0.03	0.28	3.26	4.74	9.00	9.14	1.63	2.27	0	0.12	0	0	0	30.44
WALMAR SCHOOL	29.09	0	0.15	0	0.39	2.77	4.58	10.23	8.04	1.06	1.73	0.14	0	0	0	0	28.94
WALNUT CREEK 2 ESE	27.08	0	0.03	0	0.30	2.30	3.77	9.56	8.53	0.99	1.59	0	0.01	0	0	T	27.05

**TABLE A-2 (Cont.)
PRECIPITATION DATA**

Precipitation in inches

Station Name	Total July 1 to June 30	1968						1969									Total Oct. 1 to Sept. 30
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
SAN FRANCISCO BAY AREA																	
EAST BAY E4																	
WALNUT CREEK 2 ENE	25.63	0	0.02	0	0.24	2.37	3.74	9.06	7.73	0.85	1.62	0	0	0	0	0	25.61
WALNUT CREEK 4 E	23.89	T	0.03	0	0.12	2.52	3.07	8.60	6.89	1.13	1.51	0.01	0.01	0	0	T	23.86
ALAMEDA CREEK E5																	
CALAVERAS RESERVOIR	26.78	0	0.38	0	0.75	3.46	3.75	7.30	6.15	2.71	2.15	0.08	0.05	0	0	0	26.40
GERBER RANCH	28.20	0	0.04	0	0.58	3.21	3.17	10.97	7.32	1.40	1.51	T	T	0	0	0.68	28.84
LIVERMORE COUNTY FD	18.86	0	T	T	0.43	2.48	3.04	6.28	4.76	0.55	1.24	0.08	T	0	0	0	18.86
LIVERMORE SEWAGE PLANT	19.14	0	0.05	0	0.10	3.07	3.08	5.64	5.25	0.66	1.23	0.05	0.01	0	0	0.03	19.12
MOUNT HAMILTON	27.06	0	0.33	0	0.95	4.67	3.94	6.26	7.20	1.52	1.90	0.08	0.21	0	T	0.05	26.78
NILES PINNA	-	0	0	0	0.54	2.27	10.69	6.98	5.39	2.24	1.51	-	-	-	-	-	-
NEWARK	18.48	0	0.72	0	0.27	2.48	2.26	6.24	3.96	1.38	1.15	0.02	T	0	0	0.05	17.81
PLEASANTON NURSERY	22.16	0	0.02	0	0.47	2.27	4.49	5.64	5.68	1.86	1.71	T	0.02	0	0	T	22.14
SANTA CLARA VALLEY E6																	
ALAMITOS PERCOLATION POND	23.90	0	0.06	0	0.35	1.57	3.27	7.61	7.96	1.22	1.81	0.05	0	0	0	0.10	23.94
ALMADEN RESERVOIR	47.84	0	0.47	0	0.75	2.22	6.46	17.79	15.09	2.19	2.87	0	0	0	0	0.10	47.47
BLACK MOUNTAIN 2 SW	49.50	0	0.55	0.08	1.42	3.53	7.24	17.66	11.48	2.97	3.40	0.05	1.12	0	0	T	48.87
CALERO RESERVOIR	34.36	0	0.04	0	0.56	2.05	3.93	13.95	10.36	1.22	2.25	0	0	0	0	0.15	34.47
CAMBRIAN PARK	26.06	0	0.05	0	0.34	1.76	3.50	8.45	8.77	1.48	1.65	0.05	0.01	0	0	0.06	26.07
CAMPBELL WATER COMPANY	24.54	0	0.04	0	0.38	2.04	2.82	8.30	7.27	1.89	1.78	0.02	T	0	0	0.10	24.60
COYOTE RESERVOIR	34.79	0	0.05	0.01	0.58	2.83	4.25	13.80	9.73	1.42	2.01	T	0.11	0	0	0.17	34.90
GILROY 8 NE	30.07	0	0.18	0	0.58	2.09	4.19	12.37	8.33	0.65	1.65	0	0.03	0	0	0.49	30.38
GUADALUPE RESERVOIR	41.80	0	0.05	0	0.79	1.92	5.52	15.79	13.25	1.47	3.01	0	0	0	0	0.11	41.86
LAKE ELSMAN	55.66	RB	0.14	0	1.68	2.99	8.54	20.48	16.37	1.82	3.49	0.09	0.06	0	0	0.02	55.54
LEROY ANDERSON DAM	35.18	0	0.78	0	0.51	2.66	4.20	13.88	9.44	1.41	2.27	0.01	0.02	0	0	0.08	34.48
LEXINGTON RESERVOIR	56.01	0	0.16	0	1.22	2.81	8.07	21.06	16.22	2.81	3.61	0.05	0	0	0	0.03	55.88
LOS GATOS	34.93	0	0.07	0	0.50	1.92	4.90	12.64	11.66	1.04	2.13	0.06	0.01	0	0	0.02	34.88
LOS GATOS WRIGHT	-	RE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MORGAN HILL 6 WSW	-	0	-	0	-	-	-	20.83	15.31	1.08	2.05	0	0	0	0	0.03	-
PALO ALTO CITY HALL	20.53	T	0.04	0	0.27	1.93	2.92	7.65	4.94	1.32	1.45	0.01	T	0	0	0.03	20.52
PENITENCIA RAIN GAGE	-	0	0.26	0	1.00	3.37	2.80	6.20	-	1.78	1.76	0.12	0	0	0	0	-
REDWOOD CITY	28.73	0	0.11	0	0.37	1.95	4.75	9.39	8.90	1.42	1.79	0.01	0.04	0	0	0.01	28.63
SAN JOSE	21.12	T	1.96	0	0.30	2.02	1.85	5.56	6.63	1.07	1.70	0.03	T	0	0	0.14	19.30
SAN JOSE DECIDUOUS FFS	20.34	0	0.22	0	0.28	1.87	2.35	6.46	6.12	1.32	1.66	0.06	0	0	0	0.07	20.19
SANTA CLARA UNIVERSITY	20.39	0	0.66	0	0.26	1.95	2.33	5.99	6.42	1.09	1.63	0.06	0	0	0	0.07	19.80
SARATOGA CLARK	30.39	0	0.13	0	0.48	1.90	4.33	11.26	8.55	1.55	2.17	0.02	0	0	0	0.02	30.28
SARATOGA GAP MAINT STN	-	0	0.38	0	2.12	4.56	9.53	26.60	19.00	2.25	4.80	-	0.70	-	-	-	-
SARATOGA KRIEGE	31.11	0	0.09	0	0.53	1.87	5.08	11.51	10.18	0.70	1.15	0	0	0	0	0	-
SEARSVILLE LAKE	40.83	T	0.36	0	0.74	2.71	7.22	14.05	9.50	3.54	2.68	0.01	0.02	0	0	T	40.47
STEVENS CREEK RESERVOIR	42.41	0	0.34	0	0.90	1.99	4.58	15.55	13.25	2.69	3.11	0	0	0	0	0.04	42.11
VASONA RESERVOIR	29.39	0	0.12	0	0.65	1.81	3.46	10.83	8.88	1.44	2.20	0	0	0	0	0.02	29.29
WRIGHTS	64.15	0	0.33	0	1.42	3.73	10.07	23.57	18.74	1.78	4.30	0.07	0.14	0	0	T	63.82
BAYSIDE-SAN MATEO E7																	
BURLINGAME	28.84	0	0.07	0	0.51	2.63	4.94	9.54	8.81	1.18	1.13	0	0.03	0	0	0	28.77
SAN FRANCISCO WB AIRPORT	28.28	T	0.06	T	0.45	2.47	4.49	8.92	8.62	1.34	1.87	T	0.06	T	T	0.02	28.24
SAN FRANCISCO FOB	25.09	T	0.03	0.06	0.62	2.67	3.91	7.74	7.26	1.01	1.74	T	0.05	T	T	0.01	25.01
SAN MATEO	24.24	0	0.07	0	0.12	2.30	4.28	7.18	7.25	1.24	1.80	0	0	0	0	0.04	24.21
COAST-SAN MATEO E8																	
HALF MOON BAY	31.55	0	0.28	0	0.65	2.69	5.90	8.06	8.68	2.07	2.76	0.06	0.40	0	0	0.21	31.48
LA HONDA	41.15	T	0.63	0	0.83	3.31	6.02	12.82	11.35	2.26	2.91	0.10	0.92	0	0	0.04	40.56
PORTOLA STATE PARK	66.13	0.03	0.43	0.13	2.02	3.99	11.28	22.48	16.64	3.85	4.67	T	0.61	0	0	0.02	65.56
SAN FRANCISCO SUNSET	26.52	0.01	0.10	0.05	0.73	3.26	4.87	7.36	7.20	1.00	1.87	0.02	0.05	0	0	0.10	26.46
SAN GREGORIO 2 SE	41.15	0.15	0.42	0.28	0.86	3.67	6.52	11.97	10.74	2.45	3.02	0.19	0.88	0.11	0.04	0.11	40.56
NORTH COASTAL AREA																	
MENDOCINO COAST F8																	
BOONVILLE HMS	54.93	0	1.25	0.14	1.29	3.33	16.68	16.90	10.57	1.94	2.81	0.02	0	0	0	0.16	53.70
CLOVERDALE 11 W	-	0	-	-	-	-	-	-	-	2.39	3.91	0	0	0	0	0.03	-
FORT BRAGG	51.81	0.05	1.34	0.43	1.84	4.88	12.81	13.50	10.67	2.33	3.23	0.29	0.44	0.02	0.03	0.58	50.62
FORT BRAGG AVIATION	49.21	0.05	1.02	0.39	1.76	5.69	11.47	11.12	11.54	2.30	3.23	0.29	0.35	0	0	0.41	48.16
FORT ROSS	47.43	0	0.98	0.35	3.62	4.34	9.66	12.66	10.14	2.54	2.94	0.18	0.02	0.06	0.03	0.17	46.36
NAVARRO 1 NW	52.06	0	0.97	0	2.02	4.44	13.57	15.47	10.67	1.48	3.41	0.03	0	0	0	0.10	51.19
PHILO 2 NW	54.84	0	1.19	0.14	1.83	4.19	15.16	17.42	11.19	1.19	2.53	0	0	0	0	0.08	53.59
PHILO 4 NW	56.34	0	1.42	0.21	1.89	4.48	14.30	17.12	12.28	2.11	2.47	0.03	0.03	0	0	0.14	54.85
POINT ARENA	56.49	0.02	1.07	0.23	2.16	4.56	13.09	16.27	12.87	2.26	3.62	0.24	0.10	0	0	0.30	55.47
SKAGGS SPRING LAS LOMAS	78.88	0	2.00	0.20	3.82	4.64	18.43	24.00	17.93	2.69	4.85	0.29	0.03	0	0	0	76.68
YORKVILLE	74.8	0	2.5	0.1	3.1	5.5	18.9	23.1	15.8	2.0	3.8	0	0	0	0	0.1	72.3

TABLE A-2 (Cont.)
PRECIPITATION DATA

Precipitation in Inches																	
Station Name	Total July 1 to June 30	1968									1969						Total Oct. 1 to Sept. 30
		July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
NORTH COASTAL AREA																	
RUSSIAN RIVER P9																	
ALPINE DAM	68.94	0	1.32	0	6.04	6.70	15.90	18.30	14.06	3.25	3.37	0	0	0	0	0	67.62
BLAKES LANDING	-	-	0.40	0.10	2.15	3.82	9.35	10.15	7.65	1.60	2.25	-	-	0	0	0.10	-
BON TEMPE DAM	59.07	0	0.75	0	4.01	4.66	13.11	15.85	15.20	2.70	2.79	0	0	0	0	0	58.32
CAZADERO	97.51	0	1.56	0.35	6.38	6.68	20.61	31.68	21.32	3.70	4.89	0.34	0	0	0	0.03	95.63
CLOVERDALE 3 SSE	61.97	0	1.18	T	2.75	4.19	14.04	18.93	15.02	2.30	3.54	T	0.02	0	0	0	60.79
COYOTE DAM	48.30	0	1.65	0.14	1.19	4.10	15.98	12.84	8.28	1.47	2.60	0	0.05	0	0	0	46.51
GEYSERVILLE HOCKING	-	0	2.20	0	-	3.26	11.36	15.58	11.90	RE	-	-	-	-	-	-	-
GRATON	56.33	0	0.83	0.04	3.07	4.99	14.32	16.70	10.57	2.63	3.13	0.05	0	0	0	0.02	55.48
GRATON 1 W	-	RE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GUERNEVILLE	61.74	0	1.30	0.03	3.37	5.19	15.07	15.30	14.91	2.95	3.55	0.07	0	0	0	0.01	60.42
HEALDSBURG	62.28	0	0.86	0.03	2.79	4.07	13.47	20.38	15.50	2.02	3.13	0.03	T	0	0	0.01	61.40
HEALDSBURG NO. 2	59.00	0	0.65	0.03	2.69	3.87	12.82	18.75	14.59	2.29	3.31	0	T	0	0	0	58.32
HOPLAND LARGO STATION	-	-	-	-	RE	-	-	-	-	-	-	-	-	-	-	-	-
KELLOGG	68.31	0	1.08	0.17	4.47	3.35	13.67	22.38	14.38	3.48	4.69	0.32	0.32	0	0	0	67.06
KENT LAKE	90.62	0	1.15	0.07	7.52	7.79	21.25	26.57	17.43	4.70	3.77	0.15	0.22	0	0	0.01	89.41
KNIGHTS VALLEY	-	0	0.96	0.23	2.99	1.75	15.09	20.59	12.37	RE	-	-	-	-	-	-	-
LAGUNITAS LAKE	78.00	0	0.75	0	6.38	6.45	17.03	22.91	18.46	2.70	3.32	0	0	0	0	0	77.25
MOUNT TAMALPAIS 2 SW	53.3	0	1.1	0.2	3.6	6.7	13.1	12.1	11.1	2.6	2.8	0	0	0	0	0.1	52.1
NICASIO	48.05	0	0.36	0.06	3.94	5.35	10.08	11.97	10.89	2.06	3.24	0.02	0.08	0	0	0.02	47.65
NOVATO 8 WNW	-	0	-	0	-	-	-	-	-	-	-	-	0	0	0	0	-
OCCIDENTAL	70.05	0	0.99	0.19	3.58	5.83	17.16	21.05	13.61	3.46	3.98	0.20	0	0	0	0.16	69.03
PHOENIX LAKE DAM	78.21	0	0.66	0	5.45	6.17	18.02	22.86	19.22	2.51	3.32	0	0	0	0	0	77.55
POTTER VALLEY 3 SE	42.75	0	1.53	0.13	1.33	4.42	10.77	12.58	8.45	1.27	2.21	0.02	0.04	0	0	0	41.09
POTTER VALLEY POWERHOUSE	60.94	0	2.37	0.11	2.61	5.33	16.03	19.02	10.15	1.87	3.16	0.07	0.22	0	0	0	58.46
REDWOOD VALLEY	47.11	0	1.37	0.12	1.30	4.69	14.05	13.79	8.59	0.71	2.29	0	0.20	0	0	0	45.62
SANTA ROSA SEWAGE PLANT	41.16	T	0.57	0.02	2.67	3.56	9.76	11.99	8.02	1.64	2.89	0.02	0.02	0	0	0.02	40.59
SANTA ROSA	42.82	0	1.68	0.02	2.07	3.39	9.09	13.25	8.23	1.79	3.23	0.03	0.04	0	0	0.03	41.15
SEBASTOPOL 4 SSE	-	0	0.6	0	2.5	4.3	10.0	-	-	2.1	-	0	0	0	0	0.1	-
THE GEYSERS	72.77	0	1.62	0	3.14	3.13	14.97	23.77	19.35	1.27	5.41	0	0.11	0	0	0	71.15
UKIAH	51.51	0	1.35	0.07	1.22	4.57	15.69	15.11	9.34	1.29	2.82	0	0.05	0	0	0.01	50.10
UKIAH 4 WSW	61.01	0	2.40	0.20	2.01	5.59	16.17	18.52	10.51	2.34	3.15	0.11	0.01	0	0	0.08	58.49
VENADO	91.8	0	2.5	0.1	3.9	5.1	20.3	31.3	21.3	2.0	4.9	0.1	0.3	0	0	0	89.2
WOODACRE	52.58	T	0.66	0.03	1.23	4.63	12.92	11.90	17.48	0.93	2.80	0	0	0	0	0.04	51.93

TABLE A-3
EVAPORATION DATA

The definition of terms and the abbreviations used in connection with Table A-3 are as follows:

EVAP	The total amount of water evaporated from the pan in inches for the month.
WIND	The amount of movement of air over the pan in miles for the month.
AVG MAX	The arithmetic average of daily maximum water temperatures in degrees Fahrenheit for the month.
AVG MIN	The arithmetic average of daily minimum water temperatures in degrees Fahrenheit for the month.
-	Record incomplete.
RB	Record began.
RE	Record ended.

TABLE A-3 (Cont.)
EVAPORATION DATA

Evaporation in Inches
Wind in Total Miles
Water Temperature in Degrees Fahrenheit

Station Name		Total July 1 to June 30	1968						1969						Total Oct 1 to Sept 30			
			July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June		July	Aug	Sept
CENTRAL COASTAL AREA																		
LOWER SALINAS RIVER D2																		
SOLEDAD C T F	EVAP	63.93	8.04	7.74	7.14	4.74	2.88	2.50	2.47	2.21	4.92	6.14	7.76	7.39	7.87	7.90	5.93	62.71
	WIND	59159	5790	4942	4522	3949	3686	4438	5044	4547	4329	5304	6162	6446	5187	4128	3966	57186
	AVG MAX	-	-	-	78.3	71.4	64.7	53.6	58.3	60.1	68.8	75.3	79.4	81.6	84.3	81.0	80.3	-
	AVG MIN	-	-	-	53.9	49.8	47.0	37.8	40.3	40.6	42.5	44.4	46.4	51.7	51.8	52.0	54.8	-
UPPER SALINAS RIVER T9																		
NACIMIENTO DAM	EVAP	66.12	11.76	10.33	8.05	4.43	1.84	1.34	1.40	1.31	4.09	5.17	8.33	8.07	11.02	10.77	7.86	65.63
SAN FRANCISCO BAY AREA																		
NAPA-SOLANO E3																		
DUTTONS LANDING	EVAP	61.17	9.09	7.97	7.27	4.03	1.66	1.06	1.00	1.45	4.05	6.24	8.72	8.63	9.72	9.10	6.29	61.95
	WIND	-	-	3091	2849	2055	1604	1993	2294	1936	1738	-	3413	4192	3240	2319	2390	-
	AVG MAX	-	85.6	83.4	83.5	72.5	-	-	51.5	57.3	68.6	75.3	83.1	81.0	84.6	85.9	83.5	-
	AVG MIN	-	56.9	57.9	57.5	51.8	-	-	39.1	41.9	43.4	46.5	51.9	55.2	55.6	55.1	54.5	-
GRIZZLY ISLAND	EVAP	-	-	-	-	-	RB	0.84	1.43	2.08	3.79	4.85	8.28	3.95	10.25	9.98	7.66	-
	WIND	-	-	-	-	-	RB	1197	1857	1584	1420	1536	2403	2723	2062	1718	1837	-
	AVG MAX	-	-	-	-	-	RB	50.7	51.2	56.4	67.0	74.7	83.3	82.0	89.4	89.8	84.8	-
	AVG MIN	-	-	-	-	-	RB	38.7	39.5	42.3	43.1	47.5	52.5	57.3	60.2	57.5	56.3	-
YOUNTVILLE GAMBLE	EVAP	-	10.18	7.00	6.94	3.36	1.63	RE	-	-	-	-	-	-	-	-	-	-
	WIND	-	3109	2621	2451	1774	1801	RE	-	-	-	-	-	-	-	-	-	-
ALAMEDA CREEK E5																		
LIVERMORE SEWAGE PLANT	EVAP	-	12.53	9.50	9.23	-	1.83	1.54	0.66	1.08	4.89	5.92	9.99	8.98	13.08	12.85	9.43	-
	WIND	-	4290	3950	3350	-	2300	2520	3400	3320	2680	3040	4280	5101	3680	2620	2470	-
NEWARK	EVAP	63.30	9.74	8.38	7.22	4.23	2.05	1.50	1.43	1.62	4.41	6.07	8.51	8.14	9.38	8.86	6.45	62.65
	WIND	34517	3623	3739	3247	2861	2942	3497	3856	3782	3109	1342	1450	1069	1184	795	985	26872
SANTA CLARA VALLEY E6																		
ALAMITOS PERCOLATION POND	EVAP	58.80	9.02	7.71	6.52	3.63	1.79	1.58	2.18	2.00	3.92	5.75	7.61	7.09	8.76	8.42	6.28	59.01
	WIND	13646	899	973	934	881	772	1055	1120	1346	1252	1499	1462	1453	1124	814	793	13571
LEROY ANDERSON DAM	EVAP	62.20	10.44	8.53	7.89	4.72	2.12	1.42	1.18	1.81	4.26	4.12	8.20	7.51	10.63	10.64	7.42	64.03
	WIND	20900	1742	1810	1795	1408	1095	1557	1534	1467	2078	2163	2168	2083	1804	1661	1497	20515
LEXINGTON RESERVOIR	EVAP	55.47	8.63	7.26	6.23	4.04	1.61	6.49	0.73	1.79	3.00	4.17	6.34	5.18	9.32	8.54	6.02	57.23
	WIND	9904	591	757	653	643	660	1364	1337	1306	547	655	628	763	-	528	703	-
BAYSIDE-SAN MATEO E7																		
BURLINGAME	EVAP	52.07	8.80	6.73	6.22	3.29	1.37	0.88	0.65	1.09	3.33	5.76	7.43	6.52	9.41	8.37	5.94	54.04
	WIND	22066	2556	2090	1887	1434	1301	1157	1132	1312	1973	2258	2508	2458	2628	2528	2411	23100
	AVG MAX	-	83.3	81.9	80.7	73.8	65.1	58.6	53.9	57.8	68.1	73.1	81.0	72.6	78.2	76.9	74.5	-
	AVG MIN	-	56.8	59.7	56.3	52.6	49.3	42.3	43.6	44.9	46.1	49.1	54.1	53.2	53.7	49.5	53.9	-
NORTH COASTAL AREA																		
RUSSIAN RIVER F9																		
COYOTE DAM	EVAP	66.14	13.58	8.36	8.09	4.07	1.31	1.04	2.77	1.52	3.94	5.30	7.81	8.35	12.05	10.71	8.58	67.45
	WIND	-	-	1684	1604	1328	694	705	2694	1245	736	-	593	1731	2059	1101	963	-
	AVG MAX	-	89.5	82.4	83.5	71.1	-	-	51.3	50.3	68.7	73.1	83.3	84.7	92.3	87.6	83.9	-
	AVG MIN	-	55.5	52.9	52.5	47.5	-	-	32.0	41.7	42.9	45.8	52.7	56.1	59.8	54.9	53.3	-
GEYSERVILLE HOCKING	EVAP	-	6.80	5.64	5.50	2.12	1.36	-	-	-	RE	-	-	RE	-	-	-	-
	WIND	-	2961	2451	-	-	-	-	2695	2612	RE	-	-	RE	-	-	-	-
KNIGHTS VALLEY	EVAP	-	-	-	4.82	-	-	-	-	1.19	RE	-	-	RE	-	-	-	-
	WIND	-	-	-	-	-	-	-	1150	1170	RE	-	-	RE	-	-	-	-
	AVG MAX	-	-	-	-	-	-	-	51.9	54.1	RE	-	-	RE	-	-	-	-
	AVG MIN	-	-	-	-	-	-	-	41.2	41.1	RE	-	-	RE	-	-	-	-
SANTA ROSA SEWAGE PLANT	EVAP	65.19	9.36	7.19	7.49	4.32	2.15	3.62	2.86	2.44	4.88	6.59	6.91	7.38	9.57	9.76	7.59	68.07
	WIND	26085	2840	2714	2167	1667	1318	1521	2847	1880	1584	2702	2530	2315	2871	2133	2019	25387

Appendix B

SURFACE WATER MEASUREMENTS

INTRODUCTION

In this appendix, surface water data are presented for the period October 1, 1968, through September 30, 1969. These data consist of imported water to the report area, daily mean gage heights, and daily maximum and minimum tides. Data station locations are shown on Figure D-1, pages 58, 59, 60, and 61.

A comprehensive alphabetical list of historical, as well as present streamflow and water stage gaging stations, is included in Department of Water Resources Bulletin No. 157, "Index to Stream Gaging Stations in and Adjacent to California", to be published in 1970. The station numbering system used in this bulletin is described in Bulletin No. 157.

TABLE B-1
SURFACE WATER IMPORTS TO THE CENTRAL COASTAL AREA

IMPORT	1969 Water Year												
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	TOTAL
<u>CITY OF VALLEJO FROM CACHE SLOUGH</u> a													
Total acre-feet	1334	859	1102	713	655	753	884	1357	1334	1425	1422	1363	13201
Average cubic feet per second	22	14	18	12	12	12	15	22	22	23	23	23	18
Monthly quantities in percent of seasonal	10.1	6.5	8.3	5.4	5.0	5.7	6.7	10.3	10.1	10.8	10.8	10.3	
<u>CONTRA COSTA CANAL</u> b													
Total acre-feet	9201	6800	5404	3712	3329	3282	4377	6665	6719	9450	10852	8317	78108
Average cubic feet per second	150	114	88	60	60	53	74	108	113	154	176	140	108
Monthly quantities in percent of seasonal	11.8	8.7	6.9	4.8	4.3	4.2	5.6	8.5	8.6	12.1	13.9	10.6	
<u>HETCH HETCHY AQUEDUCT</u> c													
Total acre-feet	25781	22165	23504	6210	5659	7311	14400	18460	20940	21582	21483	21033	208528
Average cubic feet per second	419	372	382	101	102	119	242	300	352	351	349	353	288
Monthly quantities in percent of seasonal	12.4	10.6	11.3	3.0	2.7	3.5	6.9	8.9	10.1	10.4	10.3	10.1	
<u>MOKELUMNE RIVER AQUEDUCT</u> d													
Total acre-feet	16641	15581	12066	13364	15390	13236	16150	16302	18351	22149	22127	18316	199670
Average cubic feet per second	271	262	196	217	277	215	271	265	308	360	360	308	276
Monthly quantities in percent of seasonal	8.3	7.8	6.0	6.7	7.7	6.6	8.1	8.2	9.2	11.1	11.1	9.2	
<u>POTTER VALLEY POWERHOUSE FROM EEL RIVER</u> e													
Total acre-feet	17250	17800	18020	17830	16080	17880	17190	18380	14920	13050	13230	17240	198870
Average cubic feet per second	281	299	293	290	289	291	289	299	251	212	215	290	275
Monthly quantities in percent of seasonal	8.6	9.0	9.1	9.0	8.1	9.0	8.6	9.2	7.5	6.6	6.6	8.7	
<u>PUTAH SOUTH CANAL</u> b													
Total acre-feet	24982	962	758	1478	1373	2463	7720	27899	31133	33818	27917	18311	178810
Average cubic feet per second	406	16	12	24	25	40	130	454	523	550	454	308	247
Monthly quantities in percent of seasonal	14.0	0.5	0.5	0.8	0.8	1.4	4.3	15.6	17.4	18.9	15.6	10.2	
<u>SOUTH BAY AQUEDUCT</u>													
Total acre-feet	9584	5354	5748	4632	979	1318	1838	702	1471	5255	8055	8411	53347
Average cubic feet per second	156	90	93	75	18	21	31	11	25	85	131	141	74
Monthly quantities in percent of seasonal	18.0	10.0	10.8	8.7	1.8	2.5	3.4	1.3	2.8	9.8	15.1	15.8	

- a Data furnished by City of Vallejo.
- b Data furnished by U. S. Bureau of Reclamation.
- c Data furnished by the City of San Francisco.
- d Data furnished by East Bay Municipal Utility District.
- e Data furnished by U. S. Geological Survey.

TABLE B-2

DAILY MEAN GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1969	E31400	RECTOR RESERVOIR NEAR YOUNTVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	351.19	349.78	NR	NR	370.27	370.49	370.12	370.15	369.58	367.88	366.51	362.74	1
2	351.07	349.89	NR	369.18	370.25	370.48	370.10	370.17	369.54	367.83	366.48	362.48	2
3	350.97	349.97	NR	369.39	370.24	370.39	370.09	370.17	369.45	367.78	366.48	362.38	3
4	350.86	349.99	NR	369.57	370.23	370.36	370.08	370.17	369.34	367.75	366.37	362.31	4
5	350.76	350.02	NR	369.75	370.50	370.31	370.10	370.12	369.23	367.73	366.27	362.17	5
6	350.67	350.04	NR	369.89	370.37	370.29	370.15	370.11	369.12	367.72	366.16	362.06	6
7	350.60	350.06	NR	370.05	370.30	370.27	370.13	370.10	369.03	367.63	366.04	361.92	7
8	350.56	350.09	NR	370.14	370.40	370.26	370.13	370.09	368.92	367.59	365.89	361.76	8
9	350.45	350.11	NR	370.15	370.52	370.26	370.14	370.08	368.83	367.56	365.76	361.63	9
10	350.34	350.13	NR	370.15	370.42	370.23	370.15	370.12	368.73	367.52	365.62	361.49	10
11	350.26	350.17	NR	370.26	370.60	370.20	370.11	370.13	368.63	367.44	365.51	361.36	11
12	350.34	350.19	NR	370.84	370.47	370.24	370.09	370.13	368.57	367.39	365.37	361.26	12
13	350.28	350.20	NR	370.75	370.40	370.22	370.07	370.12	368.52	367.35	365.34	361.13	13
14	350.19	NR	NR	370.51	370.88	370.21	370.09	370.10	368.51	367.33	365.10	361.01	14
15	350.11	NR	NR	370.41	370.62	370.21	370.17	370.10	368.49	367.25	364.95	360.91	15
16	350.02	NR	NR	370.35	370.48	370.21	370.18	370.08	368.44	367.21	364.80	360.77	16
17	349.93	NR	NR	370.32	370.42	370.21	370.18	370.06	368.42	367.16	364.65	360.66	17
18	349.83	NR	NR	370.75	370.37	370.20	370.18	370.03	368.38	367.07	364.54	360.56	18
19	349.77	NR	NR	370.89	370.31	370.21	370.18	370.03	368.34	367.05	364.41	360.46	19
20	349.68	NR	NR	370.46	370.29	370.21	370.17	369.88	368.29	367.03	364.24	360.34	20
21	349.60	NR	NR	370.86	370.27	370.21	370.17	369.86	368.26	366.98	364.12	360.23	21
22	349.61	NR	NR	370.55	370.27	370.22	370.17	369.83	368.25	366.91	363.99	360.12	22
23	349.61	NR	NR	370.41	370.28	370.22	370.20	369.80	368.21	366.86	363.87	360.01	23
24	349.61	NR	NR	370.39	370.37	370.21	370.22	369.79	368.15	366.83	363.74	359.87	24
25	349.61	NR	NR	370.73	370.49	370.21	370.22	369.78	368.12	366.76	363.62	359.77	25
26	349.62	NR	NR	370.58	370.39	370.22	370.22	369.76	368.08	366.73	363.47	359.55	26
27	349.63	NR	NR	370.46	370.44	370.22	370.21	369.72	368.03	366.71	363.32	359.53	27
28	349.64	NR	NR	370.37	370.71	370.20	370.18	369.69	368.01	366.67	363.17	359.40	28
29	349.74	NR	NR	370.37	370.19	370.19	370.17	369.63	367.98	366.62	363.03	359.28	29
30	349.74	NR	NR	370.36	370.15	370.15	370.15	369.61	367.93	366.59	362.89	359.16	30
31	349.78	NR	NR	370.29	370.14	370.14	370.14	369.59	367.88	366.58	362.75	359.16	31

CREST STAGES

E -- ESTIMATED
NR -- NO RECORD
NE -- NO FLOW

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-13-69	0900	371.67									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
38 26 24	122 20 36	SE 19 7N 4W					MAY 1948-DATE	5-48		0.00	USCGS

Rector Reservoir is located on Rector Creek about 3 miles northeast of Yountville. Gaging station is located on the outlet tower of the reservoir. Elevation of reservoir floor is 250 feet. Spillway elevation is 370 feet.

TABLE B-3

DAILY MAXIMUM AND MINIMUM TIDES

SACRAMENTO RIVER AT COLLINSVILLE

in feet

STATION NO.	WATER YEAR
B91110	1969

DATE	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE	JULY	AUG.	SEP.	DATE
1	5.97 1.66	5.25 1.85	5.83 1.64	6.16 1.54	6.88 3.31	6.94 3.17	6.01 2.55	6.59 2.01	7.86 2.42	7.07 1.56	5.91 1.59	6.21 2.29	1
2	5.18 1.83	5.56 1.93	5.41 1.17	6.13 1.43	6.59 2.83	6.76 3.23	6.16 2.61	6.67 1.83	7.78 2.23	6.70 1.38	5.84 1.63	6.21 2.25	2
3	5.92 1.98	5.92 2.05	5.24 1.15	6.03 1.32	6.21 2.65	6.71 3.05	6.55 2.43	6.85 1.74	7.43 2.02	6.22 1.36	6.00 2.11	6.40 2.24	3
4	5.67 2.00	5.89 1.76	5.54 1.16	5.92 1.24	6.44 3.02	6.39 2.97	6.50 2.16	6.75 1.57	6.93 1.89	5.80 1.50	6.11 2.28	6.34 2.30	4
5	5.40 2.13	5.74 1.56	5.76 1.16	5.80 1.29	6.47 3.92	6.21 3.18	7.26 2.58	6.90 1.57	6.39 1.79	6.06 1.76	6.13 2.00	6.23 2.21	5
6	5.41 1.88	5.79 1.41	5.63 1.16	5.66 1.33	6.92 4.40	6.26 3.03	7.02 2.20	7.02 1.89	6.04 1.89	6.19 2.17	6.21 1.84	5.99 2.00	6
7	5.52 1.76	5.81 1.47	5.82 1.24	5.73 3.38	6.27 3.24	6.20 2.87	6.55 1.88	6.95 1.90	6.17 2.16	6.42 2.54	6.25 1.81	6.01 1.62	7
8	5.60 1.66	5.71 3.64	5.73 3.78	5.28 1.69	6.24 3.18	6.37 2.76	6.43 1.98	5.86 1.35	6.19 2.52	6.57 2.44	6.34 1.70	5.26 1.80	8
9	5.60 1.64	5.65 1.35	5.61 1.28	5.27 1.65	6.66 3.27	6.37 2.69	6.27 1.90	5.46 1.40	6.34 2.59	6.45 2.08	5.01 1.72	6.25 2.03	9
10	5.77 3.34	5.47 1.43	6.03 1.53	5.44 1.88	6.63 2.92	6.32 2.44	5.93 1.90	5.92 1.84	6.59 2.31	6.52 1.77	6.45 1.75	6.18 2.01	10
11	5.93 1.82	5.39 1.36	4.96 3.31	5.76 2.01	7.05 3.15	6.15 2.08	5.85 1.97	5.22 2.23	5.08 2.25	5.06 1.68	6.53 1.82	6.13 2.23	11
12	5.89 2.05	4.82 1.67	4.77 1.26	6.49 2.63	7.34 3.11	6.04 1.77	5.95 2.08	6.10 2.47	6.56 1.98	6.56 1.60	6.40 1.71	6.04 2.41	12
13	5.53 1.89	4.70 1.28	5.11 1.31	7.45 2.82	7.33 2.97	6.07 1.73	5.69 2.09	6.35 2.29	6.55 1.85	6.61 1.61	6.33 1.81	6.16 2.72	13
14	5.38 1.72	5.11 1.34	5.91 2.45	7.28 2.55	7.72 3.57	6.02 1.59	5.85 2.36	6.39 1.98	6.67 1.85	6.72 1.80	6.24 1.91	6.30 2.57	14
15	4.83 1.50	5.35 2.10	6.88 2.71	7.21 2.20	8.32 3.88	5.96 1.58	5.93 2.15	6.41 1.83	6.63 1.82	6.57 1.68	5.95 1.91	6.43 3.09	15
16	4.92 1.25	5.37 1.82	6.39 1.94	7.37 2.17	7.84 3.66	6.02 1.81	5.95 1.88	6.54 1.81	6.55 1.85	6.39 1.63	5.69 2.00	6.39 2.38	16
17	5.15 1.43	5.60 1.70	6.56 1.52	7.25 2.15	7.80 3.92	6.02 2.00	6.12 1.87	6.41 1.72	6.62 2.00	6.14 1.56	5.97 2.48	6.45 2.11	17
18	4.97 1.69	5.93 1.53	6.69 1.57	7.46 2.87	7.53 4.07	5.75 2.09	6.29 1.82	6.62 1.96	6.17 1.64	5.96 1.71	6.10 2.72	6.36 1.93	18
19	5.21 1.80	6.19 1.44	7.16 1.82	8.17 3.58	7.35 3.93	5.74 2.08	5.89 1.53	6.33 1.78	5.89 1.78	5.59 1.83	6.27 2.56	6.49 1.77	19
20	5.50 1.92	6.23 1.21	6.89 1.52	8.05 5.09	7.09 4.16	6.04 2.25	5.78 1.51	6.03 1.77	5.57 1.85	5.86 2.11	6.33 2.26	6.47 1.79	20
21	5.66 1.60	6.39 1.21	6.62 1.34	7.69 3.70	6.75 3.80	6.25 2.22	5.87 1.75	5.93 1.93	5.35 1.77	6.17 2.61	6.52 1.89	6.47 1.69	21
22	5.85 1.42	6.26 3.19	6.12 3.15	7.29 3.98	6.64 3.76	6.16 2.18	5.76 2.13	5.65 1.96	5.55 1.97	6.42 2.80	6.95 1.87	6.40 1.76	22
23	6.09 1.43	6.14 1.17	5.76 1.21	7.02 4.21	6.80 3.82	5.66 1.92	5.86 2.33	5.46 2.08	5.90 2.45	6.73 2.46	6.95 2.03	5.64 1.91	23
24	6.23 2.97	6.02 1.29	6.06 1.34	7.15 4.15	7.25 4.09	5.45 1.84	4.92 1.55	5.57 2.13	6.11 2.48	6.86 2.08	6.74 1.76	6.30 2.01	24
25	6.35 1.44	5.09 1.35	6.09 2.00	7.63 4.80	6.61 3.66	5.43 1.95	4.73 1.47	5.67 2.32	6.46 2.18	7.12 1.78	5.04 1.52	6.08 2.11	25
26	6.19 1.49	4.71 1.16	6.14 2.41	7.98 5.21	6.32 3.23	5.27 1.81	4.53 1.61	6.08 2.68	6.72 1.72	7.28 1.74	6.65 1.60	6.37 2.48	26
27	5.86 1.46	4.76 1.16	5.96 2.30	7.18 4.77	6.64 3.54	5.17 1.75	5.08 1.86	6.23 2.57	4.71 1.62	5.29 1.77	6.43 1.63	6.56 2.46	27
28	5.89 1.57	4.93 1.22	6.34 2.34	7.49 4.77	7.26 3.75	5.41 1.91	5.44 2.21	4.85 2.19	6.89 1.39	7.22 1.70	6.18 1.77	6.42 2.10	28
29	5.53 1.79	5.13 1.46	6.12 1.91	6.93 3.98	5.71 3.98	5.71 2.04	5.87 2.45	6.54 1.96	6.93 1.36	7.08 1.74	5.97 1.96	6.42 3.48	29
30	5.21 1.75	5.54 1.74	6.11 1.64	7.02 3.69	5.83 3.69	5.83 2.14	6.22 2.22	6.87 1.85	7.04 1.38	6.85 1.71	6.06 2.25	6.17 2.08	30
31	5.21 1.74		6.07 1.56	6.86 3.39	5.98 3.39	5.98 2.53		7.21 1.94		6.45 1.61	6.14 2.35		31
MAXIMUM	6.35	6.39	7.16	8.17	8.32	6.94	7.26	7.21	7.86	7.28	6.95	6.56	MAXIMUM
MINIMUM	1.25	1.16	1.15	1.24	2.65	1.58	1.47	1.35	1.36	1.36	1.52	1.62	MINIMUM

E— Estimated
NR— No Record

CREST STAGES

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B. & M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
38 04 25	121 51 18	SW 27 3N 1E		9.2	4-6-1958		JUNE 1929-DATE	1929	1929	0.00	USED
								1929		-3.05	USCGS
									1964	-3.54	USCGS
									1964	-3.00	USCGS

Station located 0.4 mile southwest of Collinsville, 3.3 miles northeast of Pittsburg.

TABLE B-3 (Cont.)
DAILY MAXIMUM AND MINIMUM TIDES

SUISUN BAY AT BENICIA

in feet

STATION NO	WATER YEAR
003300	1969

DATE	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEP.	DATE
1	3.11 -2.38	2.75 -1.91	3.22 -2.38	3.43 -2.77	NR NR	NR NR	3.39 -1.41	2.83 -2.37	4.97 -3.08	4.39 -3.43	3.12 -2.53	3.44 -1.53	1
2	3.10 -2.24	3.12 -1.85	2.78 -3.05	3.41 -2.87	NR NR	NR NR	3.82 -1.42	2.59 -2.73	4.65 -3.28	4.07 -3.44	3.19 -2.02	3.31 0.47	2
3	2.93 -2.14	3.39 -1.93	2.62 -3.36	3.33 -2.97	NR NR	NR NR	4.14 -1.91	4.05 -3.39	4.52 -3.30	3.52 -3.28	3.29 -1.48	3.42 -1.45	3
4	2.69 -2.03	3.34 -2.22	2.87 -3.06	3.23 -3.02	NR NR	NR NR	4.16 -2.17	3.93 -3.48	4.03 -3.28	3.20 -2.81	3.35 -1.42	3.31 -1.53	4
5	2.76 -1.77	3.16 -2.47	3.10 -3.02	3.12 -2.90	NR NR	NR NR	4.96 -1.80	4.16 -3.37	3.54 -3.04	3.38 -2.18	3.21 -1.63	3.24 -1.71	5
6	2.87 -1.90	3.16 -2.61	2.92 -3.08	3.01 -2.77	NR NR	NR NR	4.60 -2.34	4.24 -2.90	3.26 -2.53	3.55 -1.32	3.22 -1.90	3.13 0.85	6
7	3.01 -2.06	3.08 -2.56	3.06 -2.55	2.91 -2.32	NR NR	NR NR	4.04 -2.61	3.97 -2.78	3.38 -1.78	3.65 -1.25	3.26 -2.04	3.19 -2.28	7
8	3.07 -2.17	2.97 -2.58	2.99 -2.67	2.52 -2.25	NR NR	3.87 -1.51	3.91 -2.32	3.00 -3.22	3.40 -1.18	3.64 -1.56	3.41 -2.22	3.35 -2.14	8
9	3.00 -2.20	2.87 -2.36	2.89 -2.25	2.65 -1.85	NR NR	3.82 -1.51	3.72 -2.33	2.73 -2.81	3.50 -1.50	3.54 -2.00	3.33 -2.27	3.26 -1.97	9
10	3.03 -2.03	2.75 -2.37	3.15 1.43	NR NR	NR NR	3.83 -1.68	3.31 -2.31	3.06 -2.28	3.67 -1.93	3.63 -2.44	3.60 -2.24	3.26 -1.90	10
11	3.12 -1.56	2.53 1.06	2.20 -1.86	NR NR	NR NR	3.37 -2.09	3.33 -2.24	3.22 -1.90	3.68 -2.24	3.73 -2.56	2.37 -2.24	3.12 -1.61	11
12	2.96 -1.75	1.92 -2.11	2.16 -2.50	NR NR	NR NR	3.55 -2.48	3.43 -2.28	3.47 -1.81	3.71 -2.64	3.73 -2.70	3.53 -2.33	3.41 -1.24	12
13	2.70 1.20	1.89 -2.43	2.50 -2.30	NR NR	NR NR	3.53 -2.75	3.45 -2.19	3.54 -2.10	3.77 -2.89	2.48 -2.68	3.49 -2.20	3.55 -1.08	13
14	2.43 -1.83	2.48 -2.30	3.26 -1.20	NR NR	NR NR	3.57 -2.99	3.05 -1.70	3.53 -2.60	2.43 -2.90	3.86 -2.44	3.35 -2.18	3.65 -1.33	14
15	2.04 -2.11	2.80 -1.10	4.29 -1.17	NR NR	NR NR	3.55 -3.08	3.51 -2.09	2.38 -2.83	3.78 -2.82	3.72 -2.56	3.02 -2.02	3.61 -1.61	15
16	2.18 -2.50	2.88 -1.79	3.77 -2.30	NR NR	NR NR	3.66 -2.76	3.53 -2.42	3.62 -3.00	3.73 -2.82	3.51 -2.55	2.91 -1.80	3.57 -1.86	16
17	2.42 -2.33	3.17 -2.11	3.86 -2.94	NR NR	NR NR	3.69 -2.43	3.64 -2.49	3.60 -3.01	3.68 -2.50	3.28 -2.55	3.14 -1.36	3.48 -1.96	17
18	2.68 -2.11	3.52 -2.55	4.13 -3.10	NR NR	NR NR	3.66 -2.14	3.76 -2.65	3.72 -2.86	3.32 -2.81	3.03 -2.35	3.29 -1.11	3.52 -2.19	18
19	2.69 -2.01	3.78 -2.79	4.54 -2.95	NR NR	NR NR	3.44 -2.10	3.39 -2.82	3.45 -2.93	3.02 -2.51	2.85 -2.06	3.46 -0.26	3.60 -2.22	19
20	2.94 -2.01	3.82 -3.16	4.38 -3.21	NR NR	NR NR	3.73 -1.82	3.27 -2.55	3.09 -2.62	2.64 -2.21	3.11 -1.60	3.49 -1.49	3.68 -2.39	20
21	3.24 -2.43	3.96 -3.25	4.13 -3.31	NR NR	NR NR	3.93 -1.88	3.29 -2.13	2.89 -2.31	2.52 -1.96	3.42 -0.86	3.60 -2.89	3.67 -2.37	21
22	3.43 -2.72	3.74 -3.36	3.59 -3.25	NR NR	NR NR	3.64 -1.89	3.15 -1.70	2.57 -2.03	2.74 -1.53	3.59 -1.01	3.98 -2.10	3.59 -2.31	22
23	3.67 -2.80	3.54 -2.99	3.16 -2.88	NR NR	NR NR	3.13 -1.81	3.38 -1.14	2.30 -1.88	3.01 -0.95	3.80 -1.49	3.98 -2.21	3.44 -2.13	23
24	3.78 -2.77	3.19 -2.87	3.32 0.54	NR NR	NR NR	2.96 -1.63	2.42 -1.83	2.56 -1.61	3.31 -1.48	3.97 -1.95	3.99 -2.51	3.40 -1.89	24
25	3.79 -2.68	2.32 -0.28	3.52 -1.97	NR NR	NR NR	2.89 -1.46	2.07 -1.92	2.69 -1.29	3.62 -2.09	4.18 -2.42	3.95 -2.83	3.82 -1.36	25
26	3.54 0.49	2.01 -3.24	3.55 -1.41	NR NR	NR NR	2.73 -1.57	2.46 -1.81	3.12 -0.95	3.95 -2.73	4.38 -2.70	2.49 -2.77	NR NR	26
27	3.13 -2.59	2.19 -2.84	3.25 -1.61	NR NR	NR NR	2.65 -1.71	2.93 -1.60	3.31 -1.55	4.16 -3.04	4.46 -2.91	3.76 -2.67	NR NR	27
28	2.99 -2.56	2.43 -2.57	3.62 -1.64	NR NR	NR NR	2.85 -1.73	3.39 -1.49	3.68 -2.30	4.31 -3.58	2.52 -2.95	3.32 -2.45	NR NR	28
29	2.74 -2.08	2.61 -2.09	3.32 -2.21	NR NR	NR NR	3.11 -1.93	3.75 -1.44	4.04 -2.88	4.45 -3.76	4.29 -3.03	3.28 -2.07	NR NR	29
30	2.59 -2.10	2.88 -2.05	3.32 -2.59	NR NR	NR NR	3.27 -1.93	2.88 -1.94	2.39 -3.22	2.49 -3.64	4.07 -2.90	3.44 -1.56	NR NR	30
31	2.66 -2.10	3.36 -2.75	NR NR	NR NR	NR NR	3.47 -1.61	NR NR	3.03 -3.29	NR NR	3.83 -2.81	3.46 -1.50	NR NR	31
MAXIMUM	3.79	3.96	4.54	NR	NR	NR	4.96	4.24	4.97	4.46	3.99	NR	MAXIMUM
MINIMUM	-2.80	-3.36	-3.36	NR	NR	NR	-2.82	-3.48	-3.76	-3.44	-2.83	NR	MINIMUM

E - Estimated
NR - No Record

CREST STAGES								
DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.A.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
38 02 27	122 08 04	SW 6 2W 2W		5.7	4-6-1958		JUN 29-APR 40 APR 40-DATE	1929 1940 1942	1940 1942	-2.21 -5.00 0.00	OCCS USCS USCS

Station located on channel side of wharf (formerly located on inshore side of wharf) immediately southeast of Benicia. Maximum gage height listed does not indicate maximum discharge. Period of record intermittent from 1929 to 1940.

TABLE B-4

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS OF SURFACE WATER DATA

Location of Error or Revision					Change or Revision	
Report	Page	Mile & Bank	Name	Item	From	To
Bulletin No. 23-62	396		Suisun Bay at Benicia Arsenal	<u>1962</u> Daily Maximum and Minimum Tides for the period 3-1-62 to 3-28-62, inclusive	Published values	2.00 feet lower than published values
				Maximum for March 1962	16.72	14.72
Bulletin No. 130-63	B-7		Suisun Bay at Benicia Arsenal	<u>1963</u> Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
Bulletin No. 130-64	48		Suisun Bay at Benicia Arsenal	<u>1964</u> Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
Bulletin No. 130-64	52		City of Vallejo from Cache Slough	Total acre-feet	Published values	Values published in Bulletin No. 130-66 Table B-2
				Average cubic feet per second	Published values	Values published in Bulletin No. 130-66 Table B-2
				Monthly quantities in percent of seasonal	Published values	Values published in Bulletin No. 130-66 Table B-2
Bulletin No. 130-67	44		Sacramento River at Collinsville	<u>1967</u> Daily Maximum and Minimum Tides		<u>Notation:</u> In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.
Bulletin No. 130-67	45		Suisun Bay at Benicia Arsenal	Daily Maximum and Minimum Tides		<u>Notation:</u> In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.

Appendix C

GROUND WATER MEASUREMENT

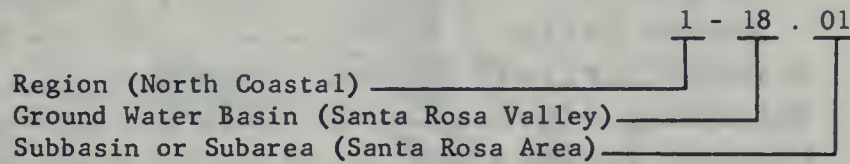
INTRODUCTION

This appendix contains ground water level measurements from 383 wells for the period October 1, 1968, through September 30, 1969. It contains tables which summarize the measurements and bar graphs of average depth to water in selected basins.

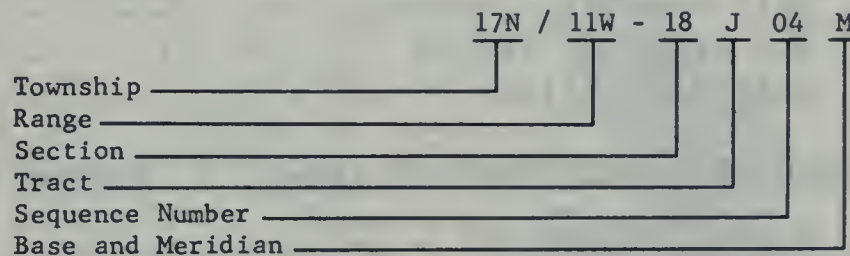
There are 33 ground water basins or areas in the Central Coastal Area for which data are reported. Wells are selected to reflect the ground water conditions of the area. These wells are continuously reviewed, and when conditions dictate, replacement wells are located and measured.

Two numbering systems are used by the Department to facilitate processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System as described below.

The regions used in this report are geographic areas defined in Section 13040 of the Water Code. That portion of Northern California covered by this report comprises the southern portion of North Coastal Region No. 1, the northern portion of Central Coastal Region No. 3, and all of San Francisco Bay Region No. 2. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and subbasins or subareas as follows:



The State Well Numbering System is based on township, range, and section subdivisions of the public land survey. The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below:



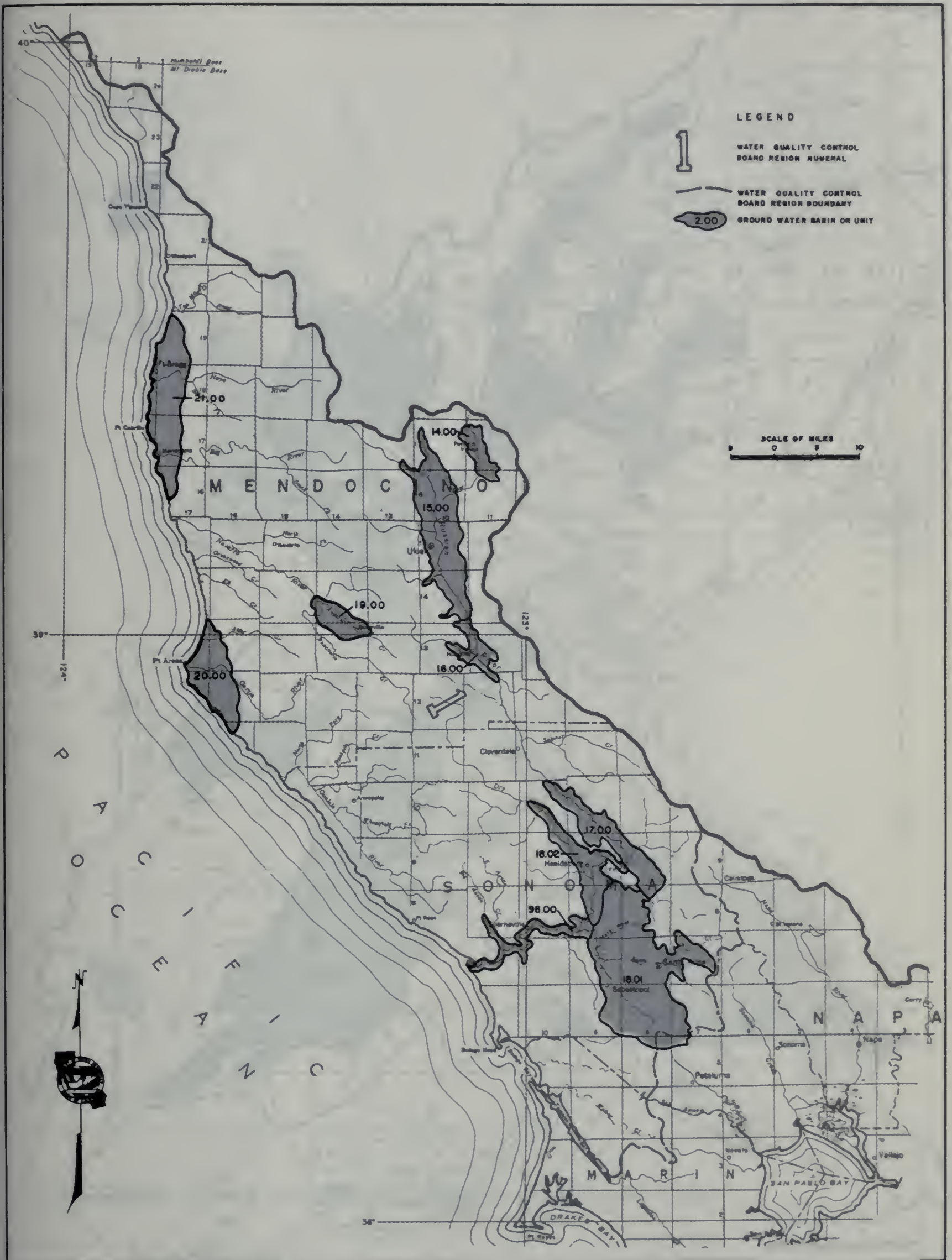
This number identifies and locates the well. In the example, the well is in Township 17 North, Range 11 West, Tract J of Section 18, located in the Mount Diablo Base and Meridian. A section is divided into 40-acre tracts as follows:

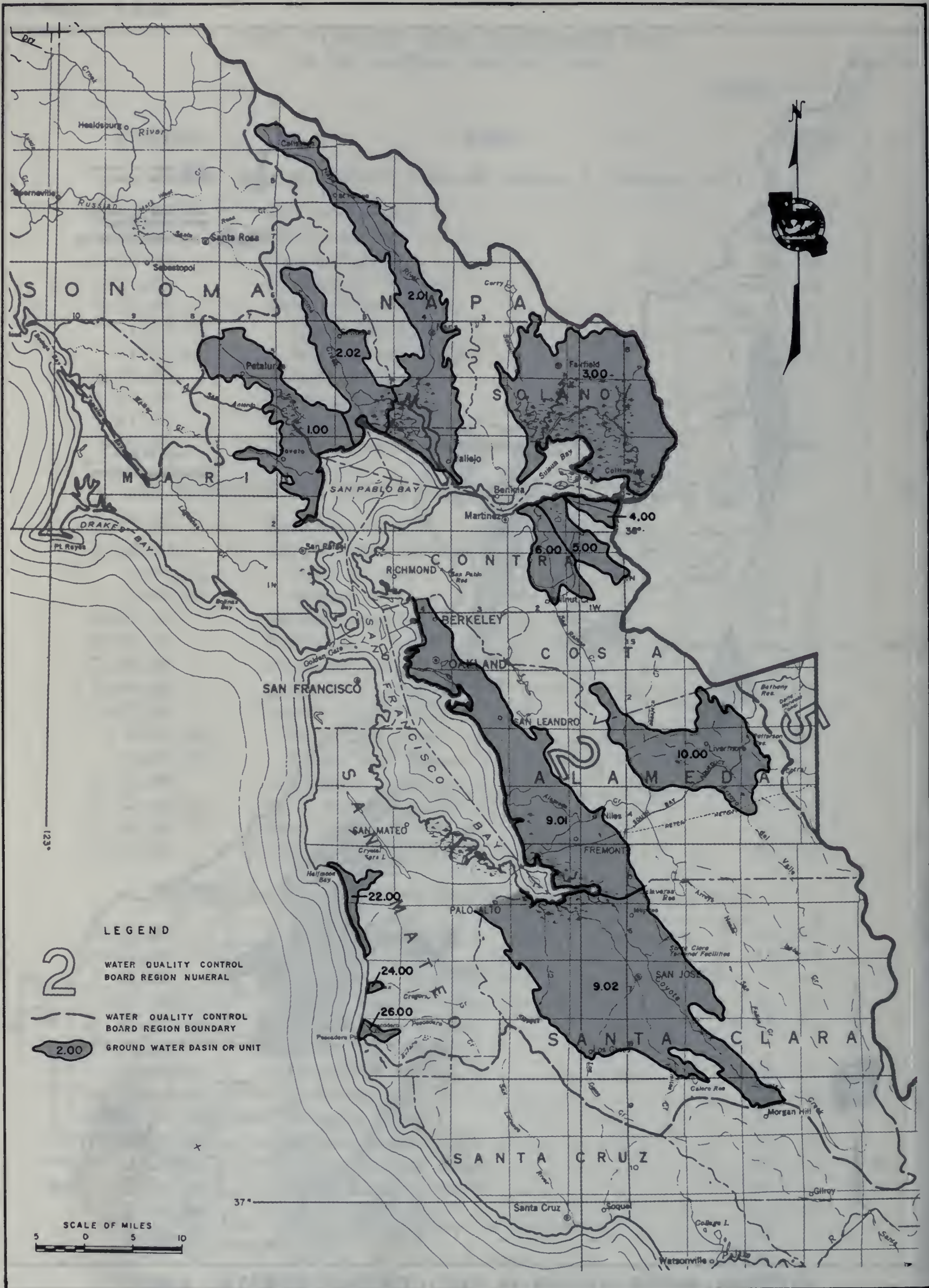
D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Sequence numbers in a tract are generally assigned in chronological order. The example designates the fourth well to be assigned a number in Tract J.

INDEX TO GROUND WATER MEASUREMENT DATA
IN THE CENTRAL COASTAL AREA

<u>Number</u>	<u>Basin</u>	<u>Page</u>
NORTH COASTAL REGION 1-00.00 (Sheet 1, Figure C-1)		
1-14.00	Potter Valley	34, 43
1-15.00	Ukiah Valley	34, 43
1-16.00	Sanel Valley	34, 43
1-17.00	Alexander Valley	34, 43
1-18.00	Santa Rosa Valley	
1-18.01	Santa Rosa Area	34, 43
1-18.02	Healdsburg Area	34, 43
1-19.00	Anderson Valley	
1-20.00	Point Arena	
1-21.00	Fort Bragg Terrace	
1-98.00	Lower Russian River Valley	34, 43
SAN FRANCISCO BAY REGION 2-00.00 (Sheet 2, Figure C-1)		
2-01.00	Petaluma Valley	34, 43
2-02.00	Napa-Sonoma Valley	
2-02.01	Napa Valley	34, 44
2-02.02	Sonoma Valley	34, 45
2-03.00	Suisun-Fairfield Valley	34, 45
2-04.00	Pittsburg Plain	34, 46
2-05.00	Clayton Valley	
2-06.00	Ygnacio Valley	34, 46
2-09.00	Santa Clara Valley	
2-09.01	East Bay Area	34, 46
2-09.02	South Bay Area	34, 47
2-10.00	Livermore Valley	34, 48
2-22.00	Half Moon Bay Terrace	34, 49
2-24.00	San Gregorio Valley	34, 49
2-26.00	Pescadero Valley	34, 49
CENTRAL COASTAL REGION 3-00.00 (Sheet 3, Figure C-1)		
3-01.00	Soquel Valley	35, 49
3-02.00	Pajaro Valley	35, 49
3-03.00	Gilroy-Hollister Valley	
3-03.01	South Santa Clara County	35, 50
3-03.02	San Benito County	35, 51
3-04.00	Salinas Valley	
3-04.01	Pressure Area	35, 51
3-04.02	East Side Area	35, 52
3-04.03	Forebay Area	35
3-04.04	Arroyo Seco Cone	35, 52
3-04.05	Upper Valley Area	35, 52
3-04.06	Paso Robles Basin	35, 52
3-04.08	Seaside Area	35, 53
3-04.09	Langley Area	35
3-04.10	Corral De Tierra Area	35
3-07.00	Carmel Valley	35, 53
3-26.00	West Santa Cruz Terrace	35, 53





GROUND WATER BASINS IN THE CENTRAL COASTAL AREA



GROUND WATER BASINS IN THE CENTRAL COASTAL AREA

TABLE C-1

**AVERAGE CHANGE OF GROUND WATER LEVELS
AND SUMMARY OF WELL MEASUREMENTS REPORTED**

Ground Water Basin or Area		Average Change Spring 1968 to Spring 1969 in Feet	Measuring Agency	Number of Wells Reported		
Name	Number			Monthly 1968-69	Fall 1968	Spring 1969
NORTH COASTAL REGION						
Potter Valley	1-14.00	-0.3	Department of Water Resources			2
Ukiah Valley	1-15.00	+1.8	Department of Water Resources			2
Sanel Valley	1-16.00	+0.9	Department of Water Resources			3
Alexander Valley	1-17.00	+1.3	Department of Water Resources			6
Santa Rosa Valley	1-18.00					
Santa Rosa Area	1-18.01	+1.0	Department of Water Resources			13
Healdsburg Area	1-18.02	+0.6	U. S. Geological Survey	9		
Lower Russian River Valley	1-98.00	+0.9	Department of Water Resources			3
SAN FRANCISCO BAY REGION						
Petaluma Valley	2-01.00	+0.8	Department of Water Resources	6		
Napa-Sonoma Valley	2-02.00					
Napa Valley	2-02.01	-0.3	Napa County Department of Water Resources	5		108 6
Sonoma Valley	2-02.02	+1.4	Department of Water Resources	5		
Suisun-Fairfield Valley	2-03.00	+3.3	Solano County Department of Water Resources	7	17	17
Pittsburg Plain	2-04.00	---	Department of Water Resources			5
Ygnacio Valley	2-06.00	+2.6	Department of Water Resources	4		
Santa Clara Valley	2-09.00					
East Bay Area	2-09.01	+4.2	Alameda County FC&WCD Alameda County Water District	3 4	6 2	6 3
South Bay Area	2-09.02	+4.7	Santa Clara Valley WCD U. S. Geological Survey	24 3		
Livermore Valley	2-10.00	+2.7	Alameda County FC&WCD	5	6	5
Half Moon Bay Terrace	2-22.00	+1.8	Department of Water Resources	4	1	3
San Gregorio Valley	2-24.00	+1.9	Department of Water Resources	2		3
Pescadero Valley	2-26.00	+1.4	Department of Water Resources	3		4

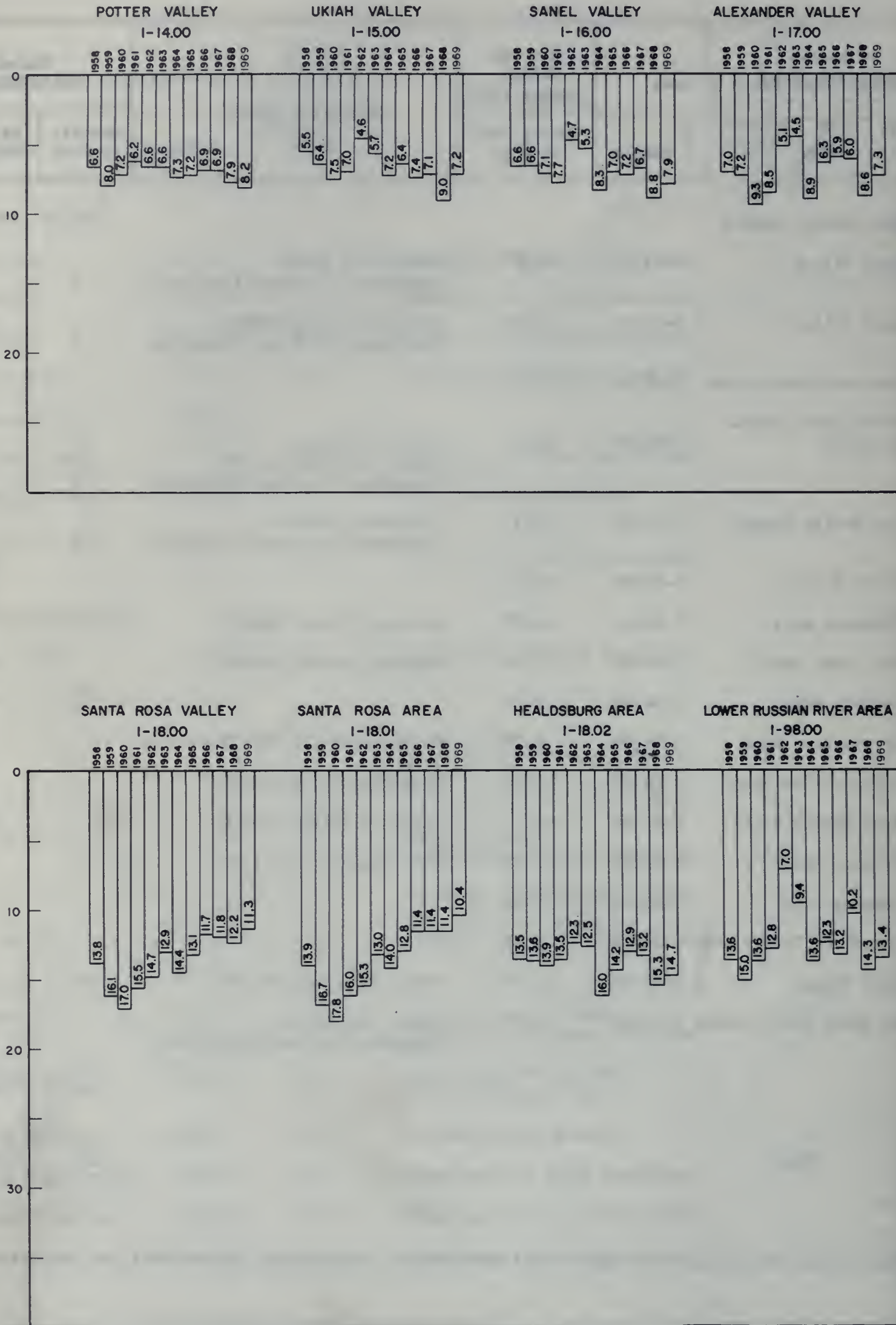
TABLE C-1 (Continued)

AVERAGE CHANGE OF GROUND WATER LEVELS
AND SUMMARY OF WELL MEASUREMENTS REPORTED

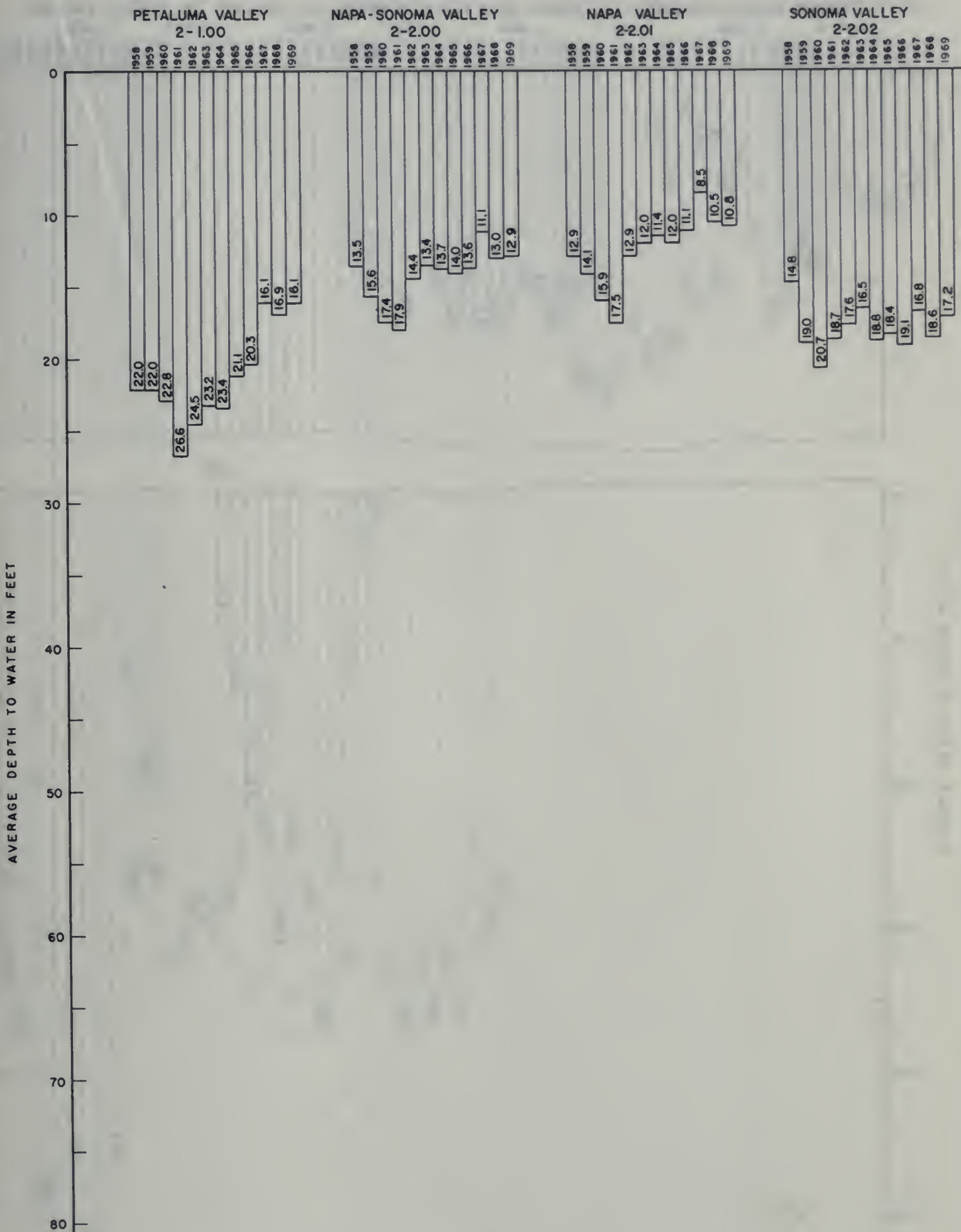
Ground Water Basin or Area		Average Change Spring 1968 to Spring 1969 in Feet	Measuring Agency	Number of Wells Reported		
Name	Number			Monthly 1968-69	Fall 1968	Spring 1969
CENTRAL COASTAL REGION						
Soquel Valley	3-01.00	+1.8	Santa Cruz County Department of Water Resources	3	3	
Pajaro Valley	3-02.00	-0.8*	Monterey County FC&WCD Department of Water Resources	6	5	4
Gilroy-Holister Valley	3-03.00	+1.2				
South Santa Clara County	3-03.01	+1.9	City of Gilroy Santa Clara Valley WCD Department of Water Resources	5 10 5		2
San Benito County	3-03.02	+0.9	San Benito County Department of Water Resources	5		2
Salinas Valley	3-04.00	-3.3				
Pressure Area	3-04.01	-4.3*	Monterey County FC&WCD	2	5	
East Side Area	3-04.02	-7.6*	Monterey County FC&WCD		1	
Forebay Area	3-04.03	-2.3*				
Arroyo Seco Cone	3-04.04	-5.2*	Monterey County FC&WCD	2		
Upper Valley Area	3-04.05	-0.6*	Monterey County FC&WCD	3	2	
Paso Robles Basin	3-04.06	+6.3	San Luis Obispo FC&WCD		38	44
Seaside Area	3-04.08	-3.9*	Post Engineer, Fort Ord	2		
Langley Area	3-04.09	-3.8*				
Corral de Tierra Area	3-04.10	-3.2*				
Carmel Valley	3-07.00	-3.6*	Monterey County FC&WCD	4		
West Santa Cruz Terrace	3-26.00	---	Santa Cruz County Department of Water Resources		1 2	
TOTAL				131	89	241

*Average change determined from water level measurements made during fall of 1967 and fall of 1968.

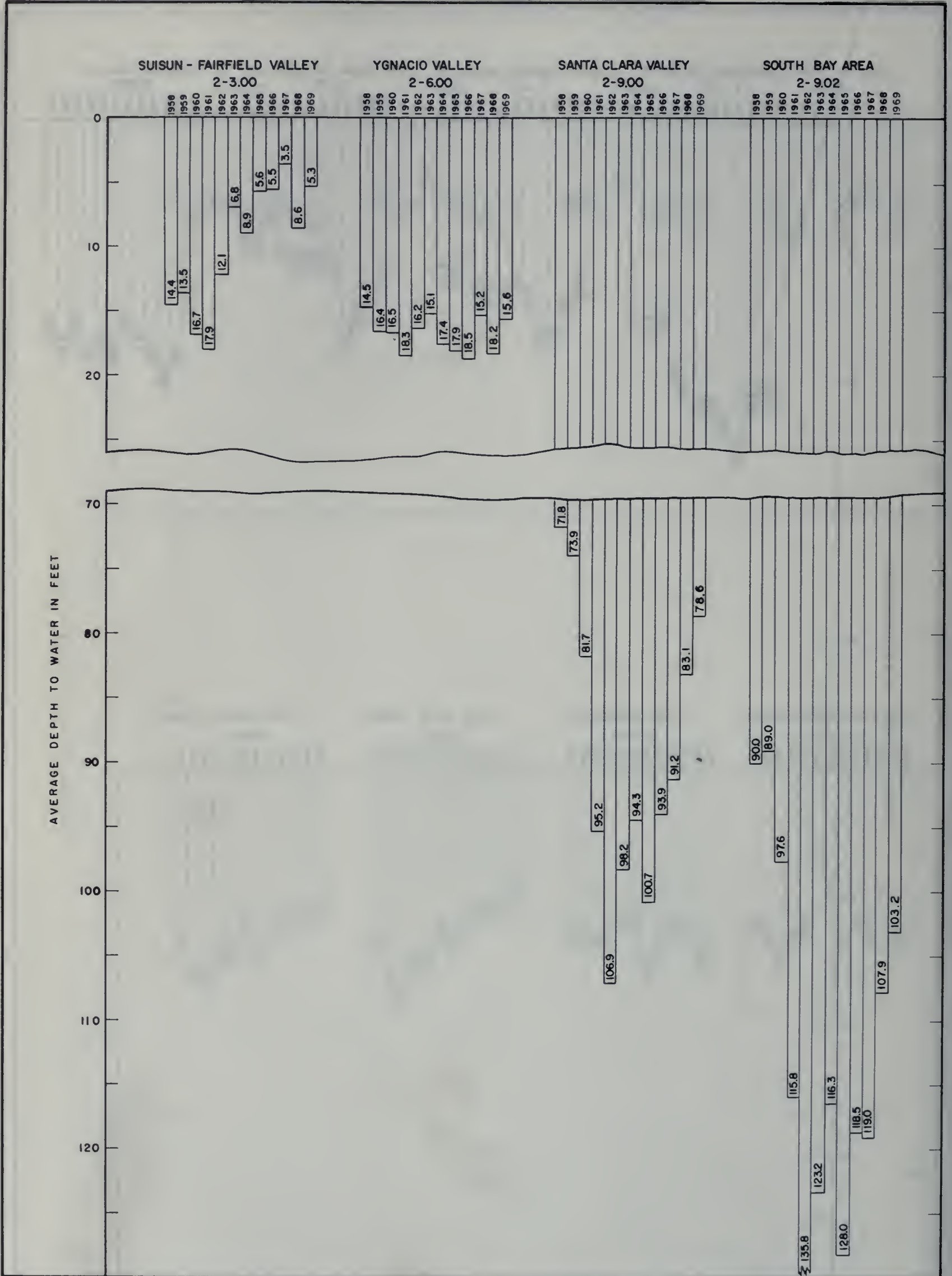
AVERAGE DEPTH TO WATER IN FEET



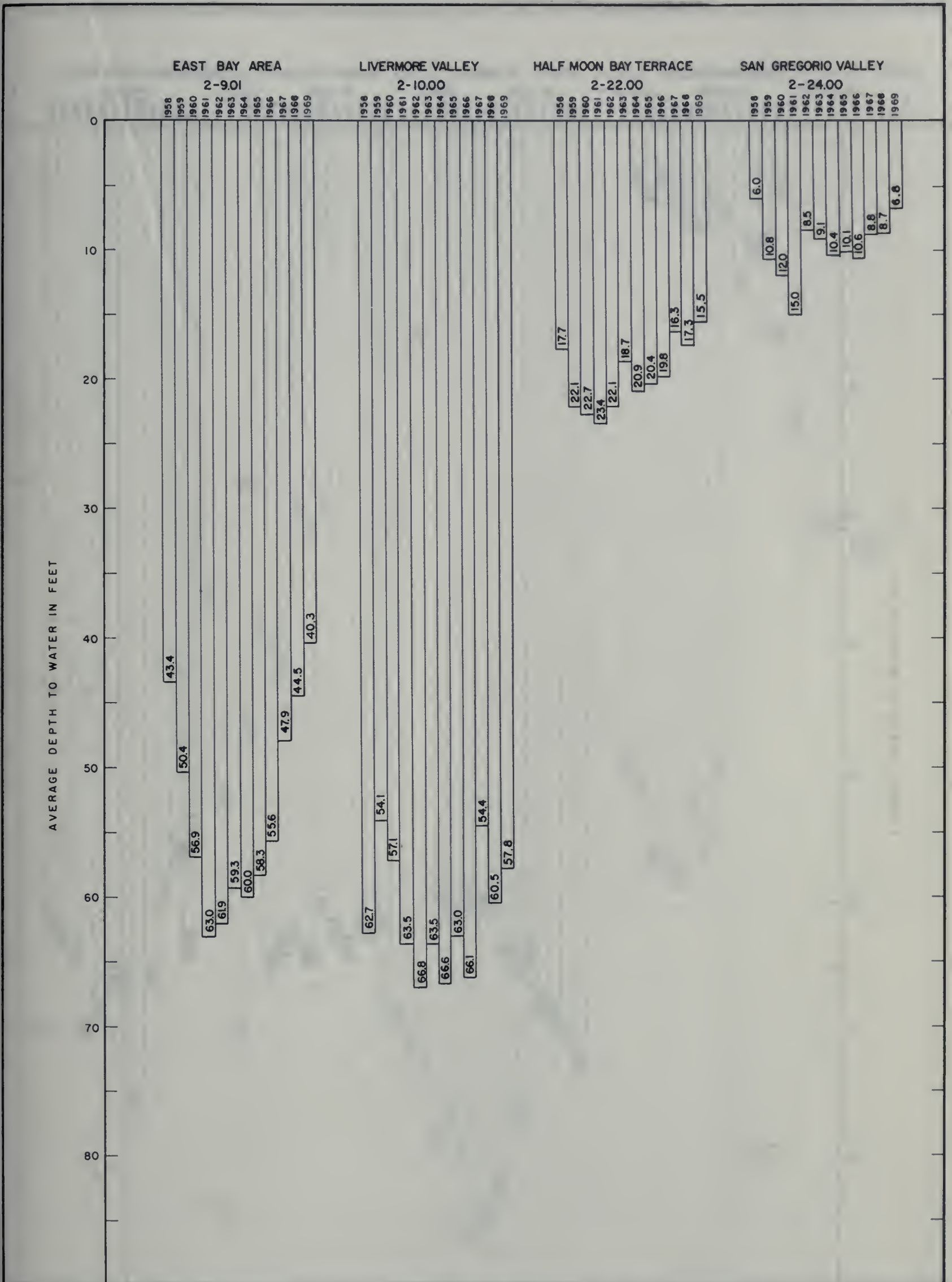
AVERAGE DEPTH TO WATER IN WELLS
 SPRING 1958 TO SPRING 1969



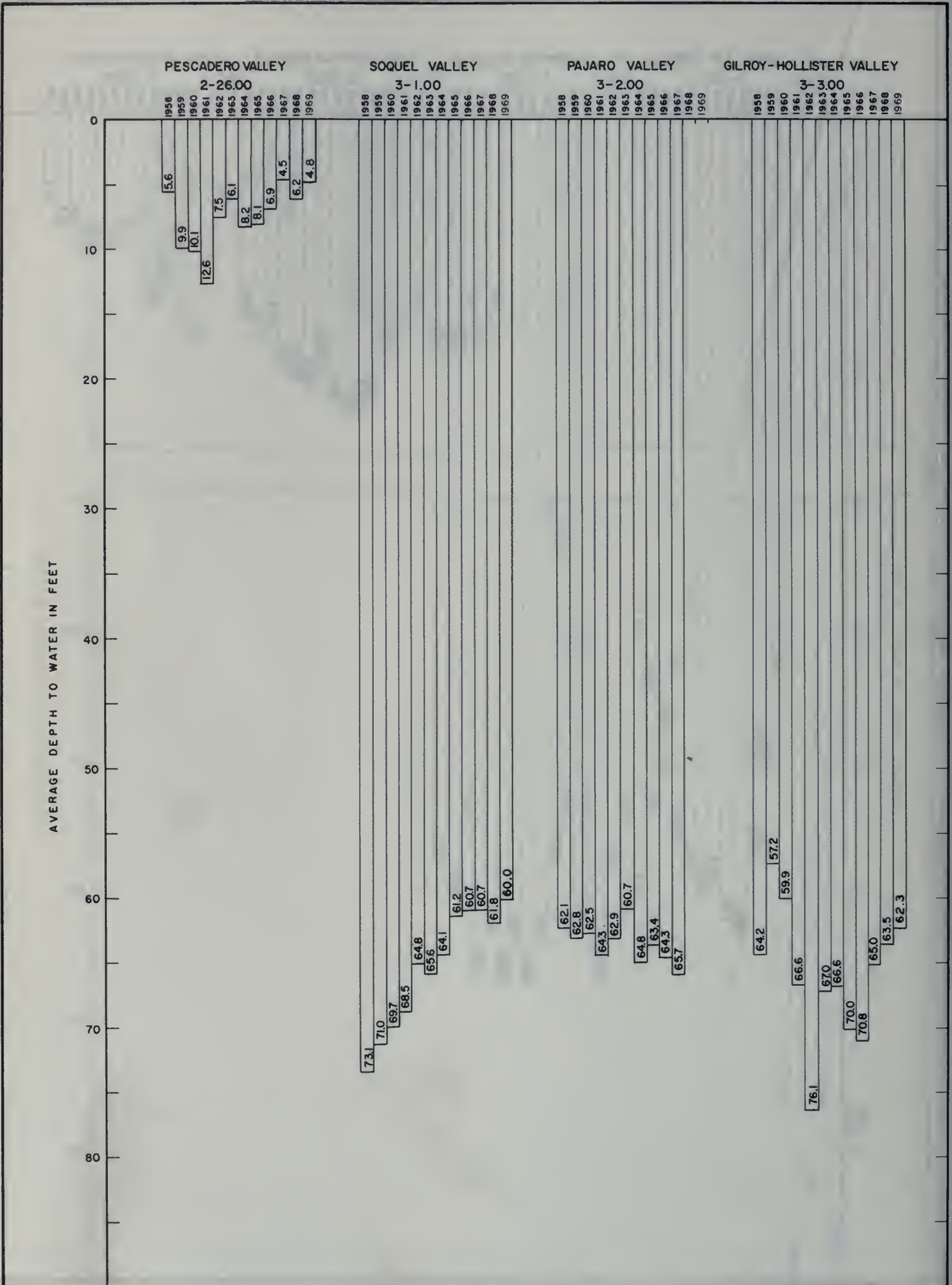
AVERAGE DEPTH TO WATER IN WELLS
 SPRING 1958 TO SPRING 1969



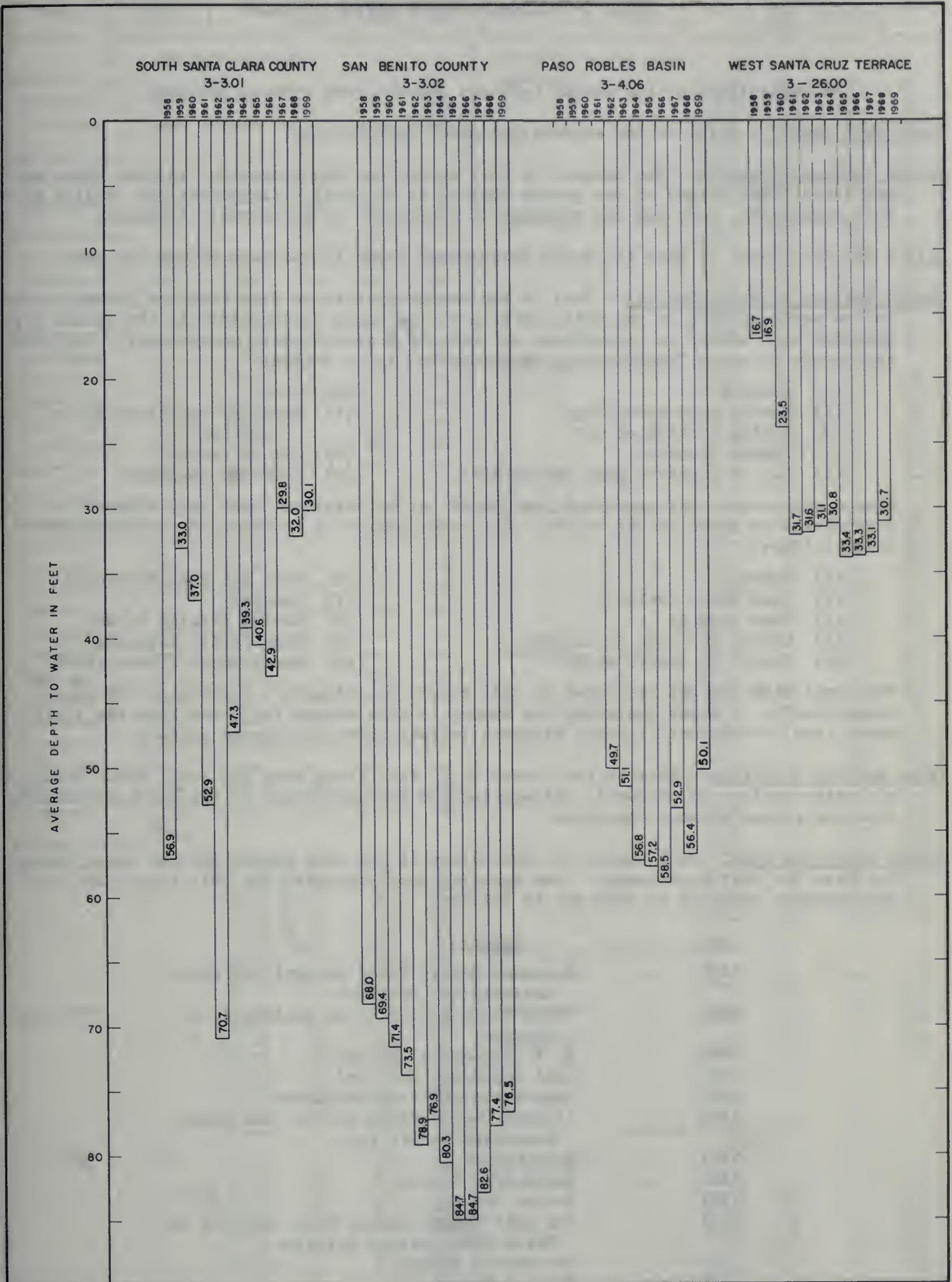
AVERAGE DEPTH TO WATER IN WELLS
SPRING 1958 TO SPRING 1969



AVERAGE DEPTH TO WATER IN WELLS
SPRING 1958 TO SPRING 1969



AVERAGE DEPTH TO WATER IN WELLS
 SPRING 1958 TO SPRING 1969



AVERAGE DEPTH TO WATER IN WELLS
SPRING 1958 TO SPRING 1969

TABLE C-2 GROUND WATER LEVELS AT WELLS

An explanation of the column headings and the code symbols follows:

State Well Number - Refer to the explanation under Introduction.

Ground Surface Elevation - The numbers in this column are the elevations in feet above mean sea level (USGS Datum) of the ground surface at the well. Elevations are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date - The date shown is when the depth measurement given in the next column was made.

Ground Surface to Water Surface - This is the measured depth in feet from the ground surface to the water surface in the well; certain of the depth measurements in the column may be preceded by a number in parentheses to indicate a questionable measurement. The code applicable to these "questionable measurements" is as follows:

- | | |
|--------------------------------------|--|
| (1) Pumping | (6) Other |
| (2) Nearby pump operating | (7) Recharge operation at or near well |
| (3) Casing leaking or wet | (8) Oil in casing |
| (4) Pumped recently | (9) Caved or deepened |
| (5) Air or pressure gage measurement | |

When a measurement was attempted, but could not be obtained, then only a number in parentheses is shown in the column. The code applicable to these "no measurements" is as follows:

- | | |
|-------------------------------|------------------------------|
| (1) Pumping | (6) Well has been destroyed |
| (2) Pump house locked | (7) Special |
| (3) Tape hung up | (8) Casing leaking or wet |
| (4) Cannot get tape in casing | (9) Temporarily inaccessible |
| (5) Unable to locate well | (0) Measurement discontinued |

The words FLOW and DRY are shown in this column to indicate a flowing or dry well, respectively. A minus preceding the number in this column indicates that the static water level in the well is this distance in feet above the ground surface.

Water Surface Elevation - This is the elevation in feet above mean sea level (USGS Datum) of the water surface in the well. It was derived by subtraction of the depth measurement from the ground surface elevation.

Agency Supplying Data - Each number in this column is the code number for the agency supplying data for that measurement. The agencies supplying data for this report and the code numbers assigned to them are as follows:

<u>Code</u>	<u>Agency</u>
2100	Monterey County Flood Control and Water Conservation District
2400	Santa Clara Valley Water Conservation District
5000	U. S. Geological Survey
5005	Post Engineer, Fort Ord
5050	Department of Water Resources
5100	Alameda County Flood Control and Water Conservation District
5101	Napa County
5102	Santa Cruz County
5109	Solano County
5117	San Luis Obispo County Flood Control and Water Conservation District
5151	San Benito County
5200	City of Gilroy
5401	Alameda County Water District

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION 1-00.00					
POTTER VALLEY 1-14.00					
17N/11W-18J01M	955.0	3-20-69	-0.6	955.6	5050
17N/11W-32J01M	905.0	3-20-69	1.1	903.9	5050
UKIAH VALLEY 1-15.00					
15N/12W-08L01M	640.0	3-20-69	17.0	623.0	5050
15N/12W-35M01M	600.0	3-20-69	1.9	598.1	5050
SANEL VALLEY 1-16.00					
13N/11W-18E01M	490.0	3-19-69	10.0	480.0	5050
13N/11W-19P01M	488.0	3-19-69	8.9	479.1	5050
13N/11W-20G01M	515.0	3-19-69	4.7	510.3	5050
ALEXANDER VALLEY 1-17.00					
10N/09W-18B01M	230.0	3-19-69	14.2	215.8	5050
10N/09W-26L02M	205.0	3-19-69	0.8	204.2	5050
10N/09W-33C01M	180.0	3-19-69	4.5	175.5	5050
11N/10W-08P01M	305.0	3-19-69	6.7	298.3	5050
11N/10W-17P02M	292.0	3-19-69	6.4	285.6	5050
11N/10W-19F02M	346.0	3-19-69	5.1	340.9	5050
SANTA ROSA VALLEY 1-18.00					
SANTA ROSA AREA 1-18.01					
6N/08W-07P02M	95.0	3-18-69	13.0	82.0	5050
6N/08W-13R01M	115.0	3-18-69	15.3	99.7	5050
6N/08W-15J03M	95.0	3-18-69	13.0	82.0	5050
6N/08W-15R01M	95.0	3-18-69	18.3	76.7	5050
7N/06W-19N01M	465.0	3-18-69	4.3	460.7	5050
7N/07W-06R01M	275.0	3-18-69	4.6	270.4	5050
7N/08W-11M01M	160.0	3-19-69	6.4	153.6	5050
7N/08W-24H01M	190.0	3-18-69	9.9	180.1	5050
7N/08W-24H02M	190.0	3-18-69	(8)		5050
7N/09W-01C01M	90.0	3-19-69	17.1	72.9	5050
7N/09W-35D02M	135.0	3-18-69	29.3	105.7	5050
8N/09W-36N01M	90.0	3-19-69	3.8	86.2	5050
8N/09W-36P01M	90.0	3-19-69	50.2	39.8	5050
HEALDSBURG AREA 1-18.02					
8N/09W-03P01M	77.0	10-16-68 (1)	33.1	43.9	5000
		11-18-68 (1)	26.3	50.7	5000
		12-16-68 (1)	23.6	53.4	5000
		1-15-69 (1)	21.3	55.7	5000
		2-12-69 (1)	18.3	58.7	5000
		3-18-69 (6)	23.7	53.3	5000
		4-15-69 (1)	18.0	59.0	5000
		5-15-69	6.7	70.3	5000
		6-16-69	6.6	70.4	5000
		7-15-69	7.3	69.7	5000
		8-15-69	7.7	69.3	5000
		9-15-69	7.5	69.5	5000
8N/09W-22L01M	67.0	10-16-68	31.9	35.1	5000
		11-18-68	30.8	36.2	5000
		12-16-68	29.3	37.7	5000
		1-15-69	23.3	43.7	5000
		2-12-69	21.3	45.7	5000
		3-18-69	30.2	36.8	5000
		4-15-69	25.5	41.5	5000
		5-15-69	27.9	39.1	5000
		6-16-69	29.7	37.3	5000
		7-15-69	38.8	28.2	5000
		8-15-69	37.4	29.6	5000
		9-15-69	32.8	34.2	5000
9N/09W-20E02M	100.0	10-16-68	17.5	82.5	5000
		11-18-68	16.4	83.6	5000
		12-16-68	13.0	87.0	5000
		1-15-69	12.4	87.6	5000
		2-12-69	10.9	89.1	5000
		3-18-69	15.2	84.8	5000
		4-15-69	15.7	84.3	5000
		5-15-69	16.2	83.8	5000
		6-16-69 (1)	18.4	81.6	5000
		7-15-69	17.1	82.9	5000
		8-15-69	17.1	82.9	5000
		9-15-69	17.5	82.5	5000

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
HEALDSBURG AREA 1-18.02 (Continued)					
9N/09W-20K04M	97.0	10-16-68	7.3	89.7	5000
		11-18-68	6.0	91.0	5000
		12-16-68	3.5	93.5	5000
		1-15-69	0.8	96.2	5000
		2-12-69	0.1	96.9	5000
		3-18-69	1.7	95.3	5000
		4-15-69	2.6	94.4	5000
		5-15-69	3.5	93.5	5000
		6-16-69	4.7	92.3	5000
		7-15-69	5.3	91.7	5000
		8-15-69	6.0	91.0	5000
		9-15-69	6.6	90.4	5000
9N/09W-28N01M	90.0	10-16-68	24.3	65.7	5000
		11-18-68	17.7	72.3	5000
		12-16-68	10.8	79.2	5000
		1-15-69	12.0	78.0	5000
		2-12-69	11.7	78.3	5000
		3-18-69	16.9	73.1	5000
		4-15-69	17.5	72.5	5000
		5-15-69	18.0	72.0	5000
		6-16-69	18.7	71.3	5000
		7-15-69 (4)	19.4	70.6	5000
		8-15-69	22.9	67.1	5000
		9-15-69	24.6	65.4	5000
9N/10W-12C01M	120.0	10-16-68	15.0	105.0	5000
		11-18-68	14.5	105.5	5000
		12-16-68	11.0	109.0	5000
		1-15-69	10.0	110.0	5000
		2-12-69	8.0	112.0	5000
		3-18-69	12.9	107.1	5000
		4-15-69	13.3	106.7	5000
		5-15-69 (1)	18.4	101.6	5000
		6-16-69	13.9	106.1	5000
		7-15-69	14.1	105.9	5000
		8-15-69	14.3	105.7	5000
		9-15-69	15.0	105.0	5000
10N/10W-22D01M	180.0	10-16-68	11.7	168.3	5000
		11-18-68	10.1	169.9	5000
		12-16-68	7.0	173.0	5000
		1-15-69	4.9	175.1	5000
		2-12-69	3.1	176.9	5000
		3-18-69	8.5	171.5	5000
		4-15-69	9.6	170.4	5000
		5-15-69	10.0	170.0	5000
		6-16-69 (1)	13.1	166.9	5000
		7-15-69	10.8	169.2	5000
		8-15-69	10.9	169.1	5000
		9-15-69	10.7	169.3	5000
10N/10W-26M01M	161.0	10-16-68	12.1	148.9	5000
		11-18-68	11.0	150.0	5000
		12-16-68	7.8	153.2	5000
		1-15-69 (1)	5.4	155.6	5000
		2-12-69	4.1	156.9	5000
		3-18-69	10.0	151.0	5000
		4-15-69	10.4	150.6	5000
		5-15-69	10.8	150.2	5000
		6-16-69	11.1	149.9	5000
		7-15-69	11.4	149.6	5000
		8-15-69 (4)	12.3	148.7	5000
		9-15-69	13.2	147.8	5000
10N/10W-35Q01M	142.0	10-16-68	5.7	136.3	5000
		11-18-68	5.9	136.1	5000
		12-16-68	1.9	140.1	5000
		1-15-69	0.2	141.8	5000
		2-12-69	0.5	141.5	5000
		3-18-69	1.5	140.5	5000
		4-15-69	1.6	140.4	5000
		5-15-69	2.2	139.8	5000
		6-16-69	2.8	139.2	5000
		7-15-69	4.0	138.0	5000
		8-15-69	5.0	137.0	5000
		9-15-69	5.7	136.3	5000
LOWER RUSSIAN RIVER VALLEY 1-98.00					
7N/10W-06N01M	25.0	3-19-69	18.3	6.7	5050
		7-00-69	(0)		5050
7N/11W-14E01M	25.0	3-19-69	16.8	8.2	5050
		7-00-69	(0)		5050
8N/10W-29D02M	50.0	3-19-69	2.9	47.1	5050
		7-00-69	(0)		5050
SAN FRANCISCO BAY REGION 2-00.00					
PETALUMA VALLEY 2-01.00					
3N/06W-01Q01M	2.0	10-14-68	-0.1	2.1	5050
		11-19-68	FLOW		5050
		12-12-68	0.4	1.6	5050
		1-16-69	FLOW		5050
		2-21-69 (1)	4.8	-2.8	5050
		3-21-69	FLOW		5050
		4-15-69 (1)	3.9	-1.9	5050
		5-12-69	1.4	0.6	5050
		6-16-69	0.1	1.9	5050

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
PETALUMA VALLEY 2-01.00 (Continued)						NAPA VALLEY 2-02.01 (Continued)					
5N/07W-19N01M	45.0	10-14-68	11.0	34.0	5050	5N/04W-19R02M	110.0	4-07-69	9.7	100.3	5101
		11-19-68	20.0	25.0	5050	5N/04W-20R02M	50.0	4-07-69	2.5	47.5	5101
		12-12-68	8.9	36.1	5050	5N/04W-21B01M	75.0	4-07-69	14.2	60.8	5101
		1-16-69	5.6	39.4	5050	5N/04W-22M01M	12.0	4-07-69	-0.9	12.9	5101
		2-21-69	(4) 5.0	40.0	5050	5N/04W-28R01M	37.0	4-07-69	50.0	-13.0	5101
		3-21-69	5.5	39.5	5050	5N/04W-29N01M	77.0	4-07-69	21.6	55.4	5101
		4-15-69	(1) 4.5	40.5	5050	6N/03W-31B01M	240.0	4-07-69	107.3	132.7	5101
		5-12-69	(4) 9.5	35.5	5050	6N/03W-31F01M	145.0	5-06-69	51.1	93.9	5050
		6-16-69	8.9	36.1	5050	6N/03W-31H01M	180.0	4-04-69	79.0	101.0	5101
5N/07W-20B02M	41.0	10-14-68	62.6	-21.6	5050	6N/03W-31N01M	170.0	4-04-69	52.8	117.2	5101
		11-19-68	54.5	-13.5	5050	6N/03W-31N02M	167.0	4-04-69	24.9	142.1	5101
		12-12-68	51.5	-10.5	5050	6N/04W-05R01M	67.0	4-04-69	2.8	64.2	5101
		1-16-69	50.0	-9.0	5050	6N/04W-06L02M	80.0	4-04-69	8.7	71.3	5101
		2-21-69	48.0	-7.0	5050	6N/04W-06N01M	75.0	4-04-69	3.9	71.1	5101
		3-21-69	48.2	-7.2	5050	6N/04W-06P01M	75.0	4-04-69	6.5	68.5	5101
		4-15-69	45.5	-4.5	5050	6N/04W-07N01M	135.0	4-04-69	18.4	116.6	5101
		5-12-69	48.0	-7.0	5050	6N/04W-08E01M	70.0	4-04-69	7.0	63.0	5101
		6-16-69	53.7	-12.7	5050	6N/04W-15Q01M	67.0	4-04-69	47.5	19.5	5101
5N/07W-21H01M	65.0	10-14-68	41.5	23.5	5050	6N/04W-16P01M	62.0	4-03-69	5.4	56.6	5101
		11-19-68	43.0	22.0	5050	6N/04W-17A01M	67.0	10-15-68	15.6	51.4	5050
		12-12-68	43.5	21.5	5050			11-19-68	14.0	53.0	5050
		1-16-69	35.7	29.3	5050			12-12-68	13.6	53.4	5050
		2-21-69	24.5	40.5	5050			1-16-69	7.9	59.1	5050
		3-21-69	23.9	41.1	5050			2-21-69	0.6	66.4	5050
		4-15-69	25.0	40.0	5050			3-21-69	1.6	65.4	5050
		5-12-69	24.8	40.2	5050			4-15-69	3.3	63.7	5050
		6-16-69	27.2	37.8	5050			5-12-69	5.1	61.9	5050
5N/07W-26R01M	53.6	10-14-68	26.5	27.1	5050			6-16-69	8.2	58.8	5050
		11-19-68	26.9	26.7	5050	6N/04W-18A02M	85.0	4-03-69	20.1	64.9	5101
		12-12-68	25.7	27.9	5050	6N/04W-19B01M	125.0	4-03-69	15.7	109.3	5101
		1-16-69	23.2	30.4	5050	6N/04W-21G01M	61.0	4-03-69	0.7	60.3	5101
		2-21-69	18.1	35.5	5050	6N/04W-22P01M	53.0	4-03-69	15.7	37.3	5101
		3-21-69	15.7	37.9	5050	6N/04W-23J01M	87.0	4-03-69	(8) 14.4	72.6	5101
		4-15-69	15.6	38.0	5050	6N/04W-26N01M	32.0	4-03-69	12.3	19.7	5101
		5-12-69	17.4	36.2	5050	6N/04W-27L02M	50.0	10-15-68	48.0	2.0	5050
		6-16-69	17.1	36.5	5050			11-19-68	45.6	4.4	5050
5N/07W-35K01M	18.8	10-14-68	18.7	0.1	5050			12-12-68	43.7	6.3	5050
		11-19-68	16.0	2.8	5050			1-16-69	36.0	14.0	5050
		12-12-68	14.6	4.2	5050			2-21-69	(4) 31.5	18.5	5050
		1-16-69	8.4	10.4	5050			3-21-69	21.9	28.1	5050
		2-21-69	5.4	13.4	5050			4-15-69	22.3	27.7	5050
		3-21-69	6.0	12.8	5050			5-12-69	26.4	23.6	5050
		4-15-69	6.6	12.2	5050			6-16-69	33.3	16.7	5050
		5-12-69	8.4	10.4	5050	6N/04W-27N01M	50.0	4-03-69	15.8	34.2	5101
		6-16-69	11.2	7.6	5050	6N/04W-28K01M	62.0	4-03-69	6.0	56.0	5101
						6N/04W-29B01M	92.0	4-03-69	4.2	87.8	5101
						6N/04W-30C01M	149.0	4-03-69	4.8	144.2	5101
						6N/04W-32J06M	94.0	4-03-69	6.5	87.5	5101
						6N/04W-32L02M	107.0	5-06-69	36.8	70.2	5050
						6N/04W-35G03M	38.0	4-02-69	14.1	23.9	5101
						6N/04W-36H01M	105.0	4-02-69	22.3	82.7	5101
						6N/05W-12R01M	180.0	4-02-69	22.0	158.0	5101
						7N/04W-30L01M	112.0	4-02-69	3.4	108.6	5101
						7N/04W-30M01M	114.0	4-02-69	1.0	113.0	5101
						7N/04W-31E01M	90.0	4-02-69	(0)		5101
						7N/04W-32B02M	180.0	4-02-69	2.3	177.7	5101
						7N/05W-03G01M	188.0	4-02-69	35.3	152.7	5101
						7N/05W-03G02M	188.0	4-02-69	11.1	176.9	5101
						7N/05W-04R02M	172.0	4-02-69	3.1	168.9	5101
						7N/05W-05A01M	182.0	4-02-69	12.7	169.3	5101
						7N/05W-06F01M	245.0	4-02-69	17.0	228.0	5101
						7N/05W-06J01M	215.0	4-02-69	10.1	204.9	5101
						7N/05W-08A01M	175.0	4-02-69	10.7	164.3	5101
NAPA-SONOMA VALLEY 2-02.00						NAPA VALLEY 2-02.01					
4N/04W-02L01M	25.0	4-09-69	8.4	16.6	5101	4N/04W-02L01M	25.0	4-09-69	8.4	16.6	5101
4N/04W-04C01M	12.0	4-09-69	6.9	5.1	5101	4N/04W-04C01M	12.0	4-09-69	6.9	5.1	5101
4N/04W-05B01M	31.0	4-09-69	11.9	19.1	5101	4N/04W-05B01M	31.0	4-09-69	11.9	19.1	5101
4N/04W-05D02M	22.0	4-09-69	4.2	17.8	5101	4N/04W-05D02M	22.0	4-09-69	4.2	17.8	5101
4N/04W-12M01M	48.0	4-09-69	13.4	34.6	5101	4N/04W-12M01M	48.0	4-09-69	13.4	34.6	5101
4N/04W-14C02M	34.0	4-08-69	30.4	3.6	5101	4N/04W-14C02M	34.0	4-08-69	30.4	3.6	5101
4N/04W-25K01M	37.0	4-08-69	1.6	35.4	5101	4N/04W-25K01M	37.0	4-08-69	1.6	35.4	5101
5N/03W-05M01M	255.0	4-08-69	79.5	175.5	5101	5N/03W-05M01M	255.0	4-08-69	79.5	175.5	5101
5N/04W-03G01M	18.0	4-08-69	10.0	8.0	5101	5N/04W-03G01M	18.0	4-08-69	10.0	8.0	5101
5N/04W-04G01M	63.5	4-08-69	5.9	57.6	5101	5N/04W-04G01M	63.5	4-08-69	5.9	57.6	5101
5N/04W-04Q01M	58.0	4-08-69	12.0	46.0	5101	5N/04W-04Q01M	58.0	4-08-69	12.0	46.0	5101
5N/04W-05P01M	121.0	4-08-69	8.0	113.0	5101	5N/04W-05P01M	121.0	4-08-69	8.0	113.0	5101
5N/04W-05P02M	122.0	4-08-69	8.3	113.7	5101	5N/04W-05P02M	122.0	4-08-69	8.3	113.7	5101
5N/04W-10F01M	30.0	4-08-69	2.2	27.8	5101	5N/04W-10F01M	30.0	4-08-69	2.2	27.8	5101
5N/04W-11F03M	16.0	4-08-69	8.2	7.8	5101	5N/04W-11F03M	16.0	4-08-69	8.2	7.8	5101
5N/04W-11M01M	13.0	10-15-68	8.9	4.1	5050	5N/04W-11M01M	13.0	10-15-68	8.9	4.1	5050
		11-19-68	7.6	5.4	5050			11-19-68	7.6	5.4	5050
		12-12-68	7.4	5.6	5050			12-12-68	7.4	5.6	5050
		1-16-69	5.0	8.0	5050			1-16-69	5.0	8.0	5050
		2-21-69	4.4	8.6	5050			2-21-69	4.4	8.6	5050
		3-21-69	5.8	7.2	5050			3-21-69	5.8	7.2	5050
		4-15-69	6.7	6.3	5050			4-15-69	6.7	6.3	5050
		5-12-69	6.8	6.2	5050			5-12-69	6.8	6.2	5050
		6-16-69	8.1	4.9	5050			6-16-69	8.1	4.9	5050
5N/04W-12F01M	130.0	5-06-69	63.3	66.7	5050	5N/04W-12F01M	130.0	5-06-69	63.3	66.7	5050
5N/04W-12H01M	121.0	4-07-69	49.5	71.5	5101	5N/04W-12H01M	121.0	4-07-69	49.5	71.5	5101
5N/04W-13H01M	132.0	4-07-69	7.7	124.3	5101	5N/04W-13H01M	132.0	4-07-69	7.7	124.3	5101
5N/04W-13H02M	120.0	4-07-69	14.0	106.0	5101	5N/04W-13H02M	120.0	4-07-69	14.0	106.0	5101
5N/04W-14C01M	17.0	5-06-69	9.7	7.3	5050	5N/04W-14C01M	17.0	5-06-69	9.7	7.3	5050
5N/04W-15C02M	22.0	4-07-69	15.4	6.6	5101	5N/04W-15C02M	22.0	4-07-69	15.4	6.6	5101
5N/04W-15E01M	22.0	4-07-69	15.4	6.6	5101	5N/04W-15E01M					

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NAPA VALLEY 2-02.01 (Continued)						NAPA VALLEY 2-02.01 (Continued)					
7N/05W-08M01M	190.0	4-01-69	16.0	174.0	5101	9N/07W-26P01M	400.0	3-27-69	0.5	399.5	5101
7N/05W-09Q01M	155.0	4-01-69	7.2	147.8	5101	9N/07W-35K01M	399.0	3-27-69	0.3	398.7	5101
7N/05W-09Q02M	155.0	10-15-68 11-19-68 12-12-68 1-16-69 2-21-69 3-21-69 4-15-69 5-12-69 6-16-69	16.8 16.5 15.0 8.0 5.4 6.2 7.4 10.2 10.6	138.2 138.5 140.0 147.0 149.6 148.8 147.6 144.8 144.4	5050 5050 5050 5050 5050 5050 5050 5050 5050	5N/05W-17C01M	85.0	10-14-68 11-19-68 12-12-68 1-16-69 2-21-69 3-21-69 4-15-69 5-12-69 6-16-69	26.3 22.4 23.1 18.6 16.1 14.6 17.2 17.1 19.8	58.7 62.6 61.9 66.4 68.9 70.4 67.8 67.9 65.2	5050 5050 5050 5050 5050 5050 5050 5050 5050
7N/05W-09Q03M	155.0	4-01-69	3.5	151.5	5101	5N/05W-18R01M	43.0	10-14-68 11-19-68 12-12-68 1-16-69 2-21-69 3-21-69 4-15-69 5-12-69 6-16-69	15.1 14.3 11.5 2.1 2.0 2.2 2.8 4.1 5.9	27.9 28.7 31.5 40.9 41.0 40.8 40.2 38.9 37.1	5050 5050 5050 5050 5050 5050 5050 5050 5050
7N/05W-10C01M	162.2	4-01-69	11.7	150.5	5101	5N/05W-28N01M	11.0	10-14-68 11-19-68 12-12-68 1-16-69 2-21-69 3-21-69 4-15-69 5-12-69 6-16-69	(1) 11.8 (1) 12.6 (1) 12.4 9.4 6.1 5.6 6.6 7.6 8.8	-0.8 -1.6 -1.4 1.6 4.9 5.4 4.4 3.4 2.2	5050 5050 5050 5050 5050 5050 5050 5050 5050
7N/05W-14B02M	139.0	4-01-69	4.1	134.9	5101	5N/05W-29N01M	16.0	10-14-68 11-19-68 12-12-68 1-16-69 2-21-69 3-21-69 4-15-69 5-12-69 6-16-69	12.7 11.7 11.9 8.7 2.1 4.4 6.7 8.3 9.3	3.3 4.3 4.1 7.3 13.9 11.6 9.3 7.7 6.7	5050 5050 5050 5050 5050 5050 5050 5050 5050
7N/05W-14J01M	140.0	4-01-69	4.2	135.8	5101	5N/05W-30J03M	16.0	10-14-68 11-19-68 12-12-68 1-16-69 2-21-69 3-21-69 4-15-69 5-12-69 6-16-69	13.7 12.5 (4) 14.8 8.0 3.6 4.7 6.8 (4) 11.8 10.3	2.3 3.5 1.2 8.0 12.4 11.3 9.2 4.2 5.7	5050 5050 5050 5050 5050 5050 5050 5050 5050
7N/05W-15A01M	143.0	4-01-69	9.7	133.3	5101	SUISUN FAIRFIELD VALLEY 2-03.00					
7N/05W-15F01M	141.0	4-01-69	4.0	137.0	5101	4N/02W-04D02M	26.0	10-10-68 3-10-69	11.7 5.6	14.3 20.4	5109 5109
7N/05W-16L01M	171.0	4-01-69	-0.5	171.5	5101	4N/02W-06A01M	35.0	10-10-68 10-16-68 11-20-68 12-13-68 1-15-69 2-18-69 3-10-69 3-21-69 4-17-69 5-14-69 6-18-69 7-15-69 8-18-69 9-15-69	15.8 15.8 15.6 15.4 12.6 10.4 10.8 12.6 12.9 13.2 15.7 17.4 15.2 15.2	19.2 19.2 19.4 19.6 22.4 24.6 24.2 22.4 22.1 21.8 19.3 17.6 19.8 19.8	5109 5050 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050
7N/05W-16N02M	193.0	4-01-69	11.9	181.1	5101	4N/02W-07D01M	17.0	10-10-68 3-10-69	14.2 1.7	2.8 15.3	5109 5109
7N/05W-17B01M	166.0	4-01-69	(0)		5101	4N/02W-09A01M	7.0	10-10-68 10-16-68 11-21-68 12-13-68 1-15-69 2-18-69 3-06-69 3-21-69 4-17-69 5-14-69 6-18-69 7-15-69 8-18-69 9-15-69	1.0 1.0 0.8 0.6 FLOW FLOW FLOW FLOW -0.3 0.4 0.9 0.9 1.1	6.0 6.0 6.2 6.4 FLOW FLOW FLOW FLOW 7.3 6.6 6.1 6.1 5.9	5109 5050 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050
7N/05W-17B02M	161.0	4-01-69	-0.3	161.3	5101	4N/02W-09N01M	4.0	10-16-68 11-21-68 12-13-68 1-15-69 2-18-69 3-21-69 4-17-69 5-14-69 6-18-69 7-15-69 8-18-69 9-15-69	0.2 FLOW -0.2 FLOW FLOW FLOW FLOW 2.0 3.0 3.6 (1) 6.1 (3) 3.2	3.8 FLOW 4.2 FLOW FLOW FLOW FLOW 2.0 1.0 0.4 -2.1 0.8	5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050
7N/05W-21G01M	152.0	4-01-69	-1.1	153.1	5101						
7N/05W-22E03M	140.0	4-01-69	-0.3	140.3	5101						
7N/05W-22N01M	133.0	4-01-69	6.2	126.8	5101						
7N/05W-23D02M	127.0	3-28-69	1.7	125.3	5101						
7N/05W-23Q01M	115.0	3-28-69	2.2	112.8	5101						
7N/05W-24P01M	127.0	3-28-69	2.2	124.8	5101						
7N/05W-25A01M	163.0	3-28-69	2.7	160.3	5101						
7N/05W-26D02M	127.0	3-28-69	1.1	125.9	5101						
7N/05W-34C02M	190.0	3-28-69	7.9	182.1	5101						
7N/05W-35F02M	175.0	3-28-69	5.4	169.6	5101						
7N/05W-36N01M	141.0	3-28-69	4.2	136.8	5101						
7N/06W-01A01M	264.0	3-28-69	11.9	252.1	5101						
8N/05W-30P01M	220.0	3-28-69	0.8	219.2	5101						
8N/05W-31R01M	212.0	3-28-69	7.1	204.9	5101						
8N/05W-31P02M	237.0	3-28-69	14.3	222.7	5101						
8N/05W-31R01M	210.0	3-28-69	10.8	199.2	5101						
8N/05W-32K04M	192.0	3-28-69	4.4	187.6	5101						
8N/06W-03M01M	330.0	5-06-69	35.8	294.2	5050						
8N/06W-04F01M	330.0	3-27-69	44.7	285.3	5101						
8N/06W-06L04M	335.0	3-27-69	(6) 15.2	319.8	5101						
8N/06W-09D02M	290.0	3-27-69	10.8	279.2	5101						
8N/06W-09H01M	290.0	3-27-69	1.8	288.2	5101						
8N/06W-09H02M	291.5	5-06-69	3.5	288.0	5050						
8N/06W-10Q01M	290.0	10-15-68 11-19-68 12-12-68 1-16-69 2-21-69 3-21-69 4-15-69 5-12-69 6-16-69	7.9 6.6 5.8 1.4 1.5 1.5 2.1 2.7 2.9	282.1 283.4 284.2 288.6 288.5 288.5 287.9 287.3 287.1	5050 5050 5050 5050 5050 5050 5050 5050 5050						
8N/06W-14N01M	285.0	3-27-69	10.5	274.5	5101						
8N/06W-14Q01M	250.0	3-27-69	8.9	241.1	5101						
8N/06W-23M01M	285.0	3-27-69	4.8	280.2	5101						
8N/06W-24B01M	300.0	3-27-69	8.9	291.1	5101						
8N/06W-25C02M	230.0	3-27-69	7.9	222.1	5101						
9N/06W-31Q01M	340.0	3-27-69	1.6	338.4	5101						
9N/06W-32M01M	360.0	3-27-69	9.7	350.3	5101						
9N/07W-24L01M	460.0	3-27-69	7.7	452.3	5101						
9N/07W-25N01M	380.0	3-27-69	3.7	376.3	5101						
9N/07W-25N02M	380.0	3-27-69	4.3	375.7	5101						

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SUISUN-FAIRFIELD VALLEY 2-03.00 (Continued)						YGNACIO VALLEY 2-06.00 (Continued)					
4N/03W-01D01M	37.0	10-10-68 3-10-69	6.8 1.7	30.2 35.3	5109 5109	1N/01W-07K01M (Continued)	83.0	3-18-69 4-16-69 5-13-69 6-17-69	9.0 10.8 10.2 10.6	74.0 72.2 72.8 72.4	5050 5050 5050 5050
4N/03W-13G01M	47.0	10-10-68 3-10-69	21.3 14.7	25.7 32.3	5109 5109	1N/02W-11X01M	63.0	10-14-68 11-19-68 12-11-68 1-16-69 2-18-69 3-18-69 4-16-69 5-13-69 6-17-69	13.4 13.0 13.0 12.3 9.3 8.9 9.7 14.7 11.6	49.6 50.0 50.0 50.7 53.7 54.1 53.3 48.3 51.4	5050 5050 5050 5050 5050 5050 5050 5050 5050
5N/01E-19R01M	39.0	10-10-68 3-11-69	10.6 5.4	28.4 33.6	5109 5109	1N/02W-13P01M	100.0	10-14-68 11-19-68 12-11-68 1-16-69 2-18-69 3-18-69 4-16-69 5-13-69 6-17-69	11.1 11.0 11.1 10.1 3.0 4.2 5.9 7.3 6.8	88.9 89.0 88.9 89.9 97.0 95.8 94.1 92.7 93.2	5050 5050 5050 5050 5050 5050 5050 5050 5050
5N/01W-02N01M	88.5	10-08-68 3-10-69	9.5 5.3	79.0 83.2	5109 5109	2N/02W-27R01M	15.0	10-14-68 11-19-68 12-11-68 1-16-69 2-18-69 3-18-69 4-16-69 5-13-69 6-17-69	5.8 4.5 4.4 3.7 1.0 1.4 2.1 3.8 4.6	9.2 10.5 10.6 11.3 14.0 13.6 12.9 11.2 10.4	5050 5050 5050 5050 5050 5050 5050 5050 5050
5N/01W-07E01M	115.0	10-08-68 3-10-69	15.3 10.8	99.7 104.2	5109 5109	SANTA CLARA VALLEY 2-09.00					
5N/01W-25R01M	25.0	10-09-68 3-10-69	10.1 4.4	14.9 20.6	5109 5109	EAST BAY AREA ABOVE HAYWARD FAULT 2-09.01					
5N/02W-08G03M	143.0	10-08-68 3-10-69	13.7 7.1	129.3 135.9	5109 5109	4S/01W-35P03M	115.3	10-11-68 10-25-68 12-03-68 12-30-68 2-06-69 3-06-69 4-02-69 4-30-69 6-04-69 7-01-69 8-06-69 9-03-69 9-30-69	115.8 110.4 102.0 102.3 98.4 92.8 92.7 97.9 103.5 114.3 117.1 119.0 129.0	-0.5 4.9 13.3 13.0 16.9 22.5 22.6 17.4 11.8 1.0 -1.8 -3.7 -13.7	5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401
5N/02W-14N03M	100.0	10-08-68 3-10-69	8.7 5.4	91.3 94.6	5109 5109	EAST BAY AREA UPPER AQUIFER 2-09.01					
5N/02W-21P03M	60.0	10-10-68 10-16-68 11-21-68 12-13-68 1-15-69 2-18-69 3-10-69 3-21-69 4-17-69 5-14-69 6-18-69 7-15-69 8-18-69 9-15-69	12.4 12.1 12.2 13.5 11.6 3.6 3.6 4.8 6.5 7.9 7.4 7.9 10.0 10.8	47.6 47.9 47.8 46.5 48.4 56.4 56.4 55.2 53.5 52.1 52.6 52.1 50.0 49.2	5109 5050 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050 5050	3S/02W-08M03M	48.0	10-02-68 11-06-68 12-18-68 1-02-69 2-05-69 3-05-69 4-02-69 5-09-69 6-04-69 7-02-69 8-06-69 9-03-69	17.9 18.9 20.0 21.2 16.2 16.7 14.2 15.4 15.6 15.9 16.7 15.5	30.1 29.1 28.0 26.8 31.8 31.3 33.8 32.6 32.4 32.1 31.3 32.5	5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100
5N/02W-24B04M	58.0	10-08-68 3-10-69	(1) 9.6 5.9	48.4 52.1	5109 5109	3S/02W-08R05M	64.0	10-00-68 4-00-69	34.8 29.0	29.2 35.0	5100 5100
5N/02W-25R01M	7.0	10-09-68 10-16-68 11-20-68 12-13-68 1-15-69 2-18-69 3-10-69 3-21-69 4-17-69 5-14-69 6-18-69 7-15-69 8-18-69 9-15-69	5.1 5.1 4.2 3.8 0.2 FLOW -0.3 0.3 2.7 4.0 4.7 5.4 5.9 5.9	1.9 1.9 2.8 3.2 6.8 5050 7.3 6.7 4.3 3.0 2.3 1.6 1.1 1.1	5109 5050 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050 5050	3S/02W-19J01M	30.0	10-02-68 11-06-68 12-18-68 1-02-69 2-05-69 3-05-69 4-02-69 5-09-69 6-04-69 7-02-69 8-06-69 9-03-69	10.3 9.8 11.7 12.3 8.7 6.8 7.6 7.8 8.0 8.7 8.6 8.3	19.7 20.2 18.3 17.7 21.3 23.2 22.4 22.2 22.0 21.3 21.4 21.7	5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100
5N/02W-27J02M	24.0	10-10-68 10-16-68 11-20-68 12-13-68 1-15-69 2-18-69 3-10-69 3-26-69 4-17-69 5-14-69 6-18-69 7-15-69 8-18-69 9-15-69	8.3 6.6 7.0 5.7 28.0 (2) 27.0 (2) 26.4 7.6 6.2 6.0 (2) 24.2 6.5 (2) 11.0 6.8	15.7 17.4 17.0 18.3 -4.0 -3.0 -2.4 16.4 17.8 18.0 -0.2 17.5 13.0 17.2	5109 5050 5050 5050 5050 5050 5109 5050 5050 5050 5050 5050 5050 5050	4S/01W-18H03M	47.0	10-11-68 10-25-68 12-03-68 12-31-68 2-05-69 3-05-69 4-02-69 5-09-69 6-04-69 7-02-69 8-06-69 9-03-69	55.4 54.6 52.5 52.3 49.7 49.6 51.6 52.2 53.3 54.3 55.4 57.3	-8.4 -7.6 -5.5 -5.3 -2.7 -2.6 -4.6 -5.2 -6.3 -7.3 -8.4 -10.3	5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401
5N/02W-29R01M	46.0	10-10-68 3-10-69	13.4 5.5	32.6 40.5	5109 5109	3S/03W-24Q02M	7.0	10-00-68 4-00-69	8.3 8.2	-1.3 -1.2	5100 5100
5N/02W-30J01M	65.0	10-16-68 11-21-68 12-13-68 1-15-69 2-18-69 3-21-69 4-17-69 5-14-69 6-18-69 7-15-69 8-18-69 9-15-69	21.2 23.1 24.1 22.2 13.1 13.8 16.4 18.0 14.8 16.7 19.4 19.8	43.8 41.9 40.9 42.8 51.9 51.2 48.6 47.0 50.2 48.3 45.6 45.2	5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050 5050	4S/01W-22P05M	80.0	10-00-68 4-00-69	38.1 36.2	41.9 43.8	5100 5100
PITTSBURG PLAIN 2-04.00						4S/02W-13C02M	36.4	4-01-69	35.1	1.3	5401
2N/01E-15N01M	40.0	4-07-69	45.8	-5.8	5050	4S/02W-24Q02M	33.4	10-00-68 4-00-69	42.6 36.1	-9.2 -2.7	5100 5100
2N/01E-15P01M	35.0	4-07-69	19.4	15.6	5050						
2N/01E-18D01M	25.0	4-06-69	22.2	2.8	5050						
2N/01W-04Q01M	5.0	4-06-69	4.3	0.7	5050						
2N/01W-12P01M	30.0	4-06-69	26.5	3.5	5050						
YGNACIO VALLEY 2-06.00											
1N/01W-07K01M	83.0	10-14-68 11-19-68 12-11-68 1-16-69 2-18-69	12.7 12.2 12.3 (1) 12.2 7.9	70.3 70.8 70.7 70.8 75.1	5050 5050 5050 5050 5050						

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
EAST BAY AREA LOWER AQUIFER 2-09.01						SOUTH BAY AREA 2-09.02 (Continued)					
2S/03W-36R01M	45.0	10-00-68 4-00-69	89.0 (1) 171.0	-44.0 -126.0	5100 5100	6S/01W-23E01M (Continued)	21.0	6-28-69 8-01-69 8-28-69 9-25-69	109.1 119.3 109.2 118.7	-88.1 -98.3 -88.2 -97.7	5000 5000 5000 5000
3S/03W-24J01M	11.0	10-02-68 11-06-68 12-18-68 1-02-69 2-05-69 3-05-69 4-02-69 5-09-69 6-04-69 7-02-69 8-06-69 9-03-69	64.2 64.2 63.0 59.8 54.9 49.4 51.4 44.7 47.2 51.8 50.1 48.0	-53.2 -53.2 -52.0 -48.8 -43.9 -38.4 -40.4 -33.7 -36.2 -40.8 -39.1 -37.0	5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100 5100	6S/02W-16R01M	48.0	10-25-68 (6) 11-25-68 12-30-68 (6) 1-17-69 2-19-69 3-27-69 (6) 4-10-69 5-12-69 6-24-69 8-19-69	102.0 95.2 93.0 91.2 88.5 86.0 86.1 94.2 90.5 94.4	-54.0 -47.2 -45.0 -43.2 -40.5 -38.0 -38.1 -46.2 -42.5 -46.4	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400
3S/03W-36R03M	5.0	10-00-68 4-00-69	72.7 58.0	-67.7 -53.0	5100 5100	6S/02W-25C01M	73.0	10-24-68 (8) 11-26-68 (8) 12-27-68 (8) 1-28-69 2-26-69 3-26-69 4-24-69 5-09-69 6-26-69 7-24-69 8-22-69 9-25-69	122.3 120.7 119.4 121.6 111.2 110.7 110.3 111.2 125.6 134.4 114.3 115.4	-49.3 -47.7 -46.4 -48.6 -38.2 -37.7 -37.3 -38.2 -52.6 -61.4 -41.3 -42.4	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400
4S/02W-02Q01M	26.0	9-25-68 4-07-69 9-23-69	93.3 54.3 82.0	-67.3 -28.3 -56.0	5401 5401 5401	6S/02W-35C01M	140.1	10-25-68 (3) 11-26-68 (3) 12-30-68 (3) 1-29-69 2-27-69 (6) 3-27-69 (6) 4-29-69 (6) 5-09-69 6-27-69 7-24-68 8-21-69 9-25-69	249.8 243.3 234.3 231.0 215.0 213.0 218.0 220.5 229.3 234.7 230.8 232.6	-109.7 -103.2 -94.2 -90.9 -74.9 -72.9 -77.9 -80.4 -89.2 -94.6 -90.7 -92.5	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400
4S/02W-35R02M	15.0	10-04-68 10-18-68 11-01-68 12-03-68 1-02-69 2-06-69 3-04-69 4-01-69 4-30-69 6-04-69 7-01-69 8-06-69 9-04-69 9-30-69	46.8 45.8 42.8 33.7 31.5 27.8 27.4 26.5 31.0 38.5 44.1 53.3 55.4 56.8	-31.8 -30.8 -27.8 -18.7 -16.5 -12.8 -12.4 -11.5 -16.0 -23.5 -29.1 -38.3 -40.4 -41.8	5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401	7S/01E-01K01M	179.0	10-16-68 11-19-68 12-19-68 1-22-69 2-19-69 (6) 3-20-69 4-21-69 5-20-69 6-16-69 7-15-69 8-18-69	169.3 153.0 154.8 156.2 153.7 148.3 148.7 149.6 146.2 148.7 148.3	9.7 26.0 24.2 22.8 25.3 30.7 30.3 29.4 32.8 30.3 30.7	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400
4S/02W-36K01M	24.0	10-04-68 10-18-68 11-01-68 12-03-68 1-02-69 2-06-69 3-04-69 4-01-69 4-30-69 6-04-69 7-01-69 8-06-69 9-04-69 9-30-69	59.4 57.6 52.1 46.0 42.7 38.4 39.4 38.5 42.9 50.6 54.2 59.1 58.1 59.7	-35.4 -33.6 -28.1 -22.0 -18.7 -14.4 -15.4 -14.5 -18.9 -26.6 -30.2 -35.1 -34.1 -35.7	5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401 5401	7S/01E-08M01M	88.0	10-23-68 (6) 11-26-68 (6) 12-30-68 (6) 1-30-69 (6) 3-28-69 (6) 4-17-69 (8)	153.0 150.0 144.0 130.0 123.0 114.2	-65.0 -62.0 -56.0 -42.0 -35.0 -26.2	2400 2400 2400 2400 2400 2400
5S/01W-09M01M	15.0	9-23-68 4-08-69	59.9 29.8	-44.9 -14.8	5401 5401	7S/01E-09D02M	95.9	10-22-68 11-18-68 12-18-68 1-10-69 2-10-69 3-10-69 4-07-69 5-05-69 6-02-69 6-28-69 8-01-69 8-28-69 9-25-69	157.2 146.3 139.8 133.5 130.4 126.6 125.9 127.6 143.2 145.2 157.3 159.1 157.3	-61.3 -50.4 -43.9 -37.6 -34.5 -30.7 -30.0 -31.7 -47.3 -49.3 -61.4 -63.2 -61.4	5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000
SOUTH BAY AREA 2-09.02						7S/01E-16C05M					
6S/01E-07E01M	15.8	10-01-68 (6) 11-01-68 (6) 12-01-68 (6) 1-00-69 (0)	100.0 85.0 80.0 (0)	-84.2 -69.2 -64.2	2400 2400 2400 2400	105.0	10-22-68 11-18-68 12-18-68 1-10-69 2-10-69 3-10-69 4-07-69 5-05-69 6-02-69 6-28-69 8-01-69 8-28-69 9-25-69	205.6 177.1 180.8 165.6 166.4 164.0 155.3 173.7 191.2 200.3 217.7 226.8 220.6	-100.6 -72.1 -75.8 -60.6 -61.4 -59.0 -50.3 -68.7 -86.2 -95.3 -112.7 -121.8 -115.6	5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000	
6S/01E-21R01M	138.0	10-18-68 11-21-68 12-19-68 1-23-69 2-19-69 3-21-69 4-23-69 8-15-69 9-02-69 9-30-69	179.6 173.0 168.7 170.2 167.8 159.3 158.6 180.2 178.3 174.8	-41.6 -35.0 -30.7 -32.2 -29.8 -21.3 -20.6 -42.2 -40.3 -36.8	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400	151.6	10-15-68 11-22-68 12-16-68 1-20-69 2-18-69 3-13-69 4-14-69 5-06-69 6-05-69 7-07-69	157.2 150.3 148.6 142.7 140.6 136.3 134.8 130.9 138.6 144.7	-5.6 1.3 3.0 8.9 11.0 15.3 16.8 20.7 13.0 6.9	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400	
6S/01E-23P02M	240.5	10-17-68 11-21-68 12-19-68 1-22-69 2-19-69 3-21-69 4-23-69 5-21-69 6-23-69 7-16-69 8-19-69 9-02-69 9-30-69	119.3 121.0 128.3 134.6 125.4 123.3 121.5 120.8 120.4 119.7 123.5 121.2 123.7	121.2 119.5 112.2 105.9 115.1 117.2 119.0 119.7 120.1 120.8 117.0 119.3 116.8	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400	7S/01E-31A02M	151.6	10-15-68 11-22-68 12-16-68 1-20-69 2-18-69 3-13-69 4-14-69 5-06-69 6-05-69 7-07-69	157.2 150.3 148.6 142.7 140.6 136.3 134.8 130.9 138.6 144.7	-5.6 1.3 3.0 8.9 11.0 15.3 16.8 20.7 13.0 6.9	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400
6S/01E-30M01M	43.0	10-22-68 (4) 11-25-68 (8) 12-24-68 (8) 1-27-69 (8) 2-25-69 3-25-69 (8) 6-25-69 (4) 7-20-69 (2) 8-20-69 (8) 9-04-69 (6)	108.5 90.6 80.3 76.4 70.3 71.5 90.6 117.0 111.3 104.0	-65.5 -47.6 -37.3 -33.4 -27.3 -28.5 -47.6 -74.0 -68.3 -61.0	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400	7S/02E-07P01M	130.0	10-16-68 11-19-68 12-19-68 1-22-69 2-19-69 3-20-69 6-21-69 (2) 5-20-69 (2) 6-16-69 (2) 7-15-69 8-18-69	135.2 134.5 132.2 130.4 128.3 129.4 130.8 136.5 137.3 136.6 135.4	-5.2 -4.5 -2.2 -0.4 1.7 0.6 -0.8 -6.5 -7.3 -6.6 -5.4	2400 2400 2400 2400 2400 2400 2400 2400 2400 2400 2400
6S/01W-23E01M	21.0	10-22-68 11-18-68 12-18-68 1-10-69 2-10-69 3-10-69 4-07-69 5-05-69 6-02-69	104.3 87.8 77.3 71.8 65.7 61.6 60.6 66.4 112.9	-83.3 -66.8 -56.3 -50.8 -44.7 -40.6 -39.6 -45.4 -91.9	5000 5000 5000 5000 5000 5000 5000 5000 5000						

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SOUTH BAY AREA 2-09.02 (Continued)					
7S/02E-17H01M	349.0	10-10-68	95.4	253.6	2400
		11-18-68 (8)	89.3	259.7	2400
		12-12-68 (8)	90.2	258.8	2400
		1-17-69 (8)	89.4	259.6	2400
		2-17-69 (8)	86.6	262.4	2400
		3-18-69 (1)	91.4	257.6	2400
		4-17-69 (8)	88.8	260.2	2400
		5-16-69 (8)	90.4	258.6	2400
		7-11-69 (8)	91.6	257.4	2400
		8-14-69 (8)	90.3	258.7	2400
7S/02E-33C01M	462.0	10-10-68	21.4	440.6	2400
		11-18-68	20.2	441.8	2400
		12-12-68	21.3	440.7	2400
		1-17-69	20.8	441.2	2400
		2-17-69	20.3	441.7	2400
		3-18-69	17.6	444.4	2400
		4-17-69	19.4	442.6	2400
		5-15-69	20.6	441.4	2400
		6-09-69	19.5	442.5	2400
		7-11-69	20.8	441.2	2400
		8-14-69	20.6	441.4	2400
9-22-69	20.0	442.0	2400		
7S/01W-35C01M	202.0	10-01-68	265.0	-63.0	2400
		11-01-68	263.0	-61.0	2400
		12-01-68 (6)	240.0	-38.0	2400
		1-01-69 (6)	230.0	-28.0	2400
		2-00-69 (0)			2400
7S/02W-03P01M	216.7	10-01-68 (6)	340.0	-123.3	2400
		11-01-68	331.0	-114.3	2400
		12-01-68 (6)	325.0	-108.3	2400
		1-00-69 (0)			2400
7S/02W-04B01M	218.0	10-25-68	233.4	-15.4	2400
		11-26-68	235.6	-17.6	2400
		12-30-68	232.7	-14.7	2400
		1-29-69	228.8	-10.8	2400
		2-24-69 (6)	223.6	-5.6	2400
		3-28-69 (6)	221.8	-3.8	2400
		4-16-69	197.6	20.4	2400
		5-26-69 (6)	214.0	4.0	2400
		6-25-69 (6)	215.6	2.4	2400
		7-28-69 (6)	214.8	3.2	2400
		8-21-69	194.8	23.2	2400
9-26-69 (6)	207.7	10.3	2400		
7S/02W-22A01M	340.0	10-28-68	29.6	310.4	2400
		11-25-68	29.4	310.6	2400
		12-31-68	27.7	312.3	2400
		1-30-69	23.5	316.5	2400
		2-24-69	19.8	320.2	2400
		3-28-69	18.3	321.7	2400
		4-16-69	16.6	323.4	2400
		5-27-69	18.1	321.9	2400
		6-25-69	15.6	324.4	2400
		7-29-69	16.4	323.6	2400
		8-21-69	17.1	322.9	2400
		9-26-69	17.8	322.2	2400
		8S/01E-07H02M	207.0	10-01-68	58.6
11-05-68	60.5			146.5	2400
12-02-68	62.7			144.3	2400
1-08-69	64.8			142.2	2400
2-03-69	58.6			148.4	2400
3-04-69 (6)	40.0			167.0	2400
4-08-69	41.8			165.2	2400
5-02-69	43.7			163.3	2400
6-04-69	48.8			158.2	2400
8-05-69	55.0			152.0	2400
8S/01E-13H01M	184.6			10-03-68 (8)	25.8
		11-06-68	26.0	158.6	2400
		12-04-68 (8)	24.7	159.9	2400
		1-10-69 (8)	23.8	160.8	2400
		2-03-69 (8)	21.9	162.7	2400
		3-06-69 (8)	16.3	168.3	2400
		4-07-69 (8)	16.7	167.9	2400
		5-01-69 (8)	19.8	164.8	2400
		6-02-69 (8)	22.3	162.3	2400
		7-01-69 (8)	22.5	162.1	2400
8-04-69 (8)	22.8	161.8	2400		
9-10-69 (8)	23.4	161.2	2400		
8S/02E-20F03M	209.0	10-04-68	(1)		2400
		11-06-68	31.3	177.7	2400
		12-05-68	32.6	176.4	2400
		1-10-69	33.7	175.3	2400
		2-07-69	31.3	177.7	2400
		3-07-69	22.3	186.7	2400
		4-09-69 (4)	25.6	183.4	2400
		5-08-69 (2)	28.4	180.6	2400
		6-09-69	30.0	179.0	2400
		7-02-69	29.2	179.8	2400
		8-04-69	30.5	178.5	2400
9-11-69	31.5	177.5	2400		
8S/02E-22D01M	239.7	10-02-68	15.4	224.3	2400
		11-12-68	16.2	223.5	2400
		12-05-68	17.0	222.7	2400
		1-10-69	15.6	224.1	2400
		2-07-69	10.3	229.4	2400
		3-06-69	10.0	229.7	2400
		4-11-69	11.2	228.5	2400
		5-13-69	13.5	226.2	2400
		6-12-69	12.7	227.0	2400
		7-08-69	12.4	227.3	2400
		8-12-69	18.2	221.5	2400
9-16-69	15.4	224.3	2400		

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA		
SOUTH BAY AREA 2-09.02 (Continued)							
8S/01W-15B01M	331.2	10-01-68 (6)	32.4	298.8	2400		
		11-26-68 (6)	35.0	296.2	2400		
		12-17-68 (6)	34.0	297.2	2400		
		1-21-69 (6)	33.0	298.2	2400		
		2-18-69 (6)	31.0	300.2	2400		
		3-14-69 (6)	28.0	303.2	2400		
		4-15-69	25.3	305.9	2400		
		5-06-69	25.7	305.5	2400		
		9S/02E-01J01M	314.6	10-02-68	36.8	277.8	2400
				11-12-68	32.6	282.0	2400
12-06-68	33.4			281.2	2400		
1-13-69	32.6			282.0	2400		
2-10-69	26.2			288.4	2400		
3-10-69	16.8			297.8	2400		
4-11-69	17.6			297.0	2400		
5-13-69	22.8			291.8	2400		
7-08-69	30.8			283.8	2400		
8-12-69	33.0			281.6	2400		
9-16-69	(1)		2400				
9S/02E-02J02M	287.6	10-02-68 (2)	30.3	257.3	2400		
		11-08-68	26.8	260.8	2400		
		12-06-68	23.2	264.4	2400		
		1-13-69	23.7	263.9	2400		
		2-07-69	22.2	265.4	2400		
		3-07-69	8.8	278.8	2400		
		4-10-69	6.4	281.2	2400		
		5-08-69	8.5	279.1	2400		
		6-10-69	11.9	275.7	2400		
		7-02-69	13.5	274.1	2400		
		8-05-69	16.1	271.5	2400		
9-02-69	17.5	270.1	2400				
9-30-69 (2)	20.8	266.8	2400				
LIVERMORE VALLEY 2-10.00							
2S/02E-25N01M	555.3	10-00-68	10.5	544.8	5100		
		4-00-69	7.5	547.8	5100		
2S/01W-26C01M	416.9	10-00-68	37.4	379.5	5100		
		4-00-69	35.1	381.8	5100		
3S/01E-07Q01M	321.7	10-00-68	(0)		5100		
3S/01E-09R02M	353.2	10-02-68	134.0	219.2	5100		
		11-06-68	113.0	240.2	5100		
		12-04-68	118.5	234.7	5100		
		1-02-69	104.0	249.2	5100		
		2-05-69	99.7	253.5	5100		
		3-05-69	95.5	257.7	5100		
		4-02-69	90.0	263.2	5100		
		5-08-69	91.5	261.7	5100		
		6-04-69 (1)	127.0	226.2	5100		
		7-02-69 (1)	112.0	241.2	5100		
		8-06-69 (1)	133.0	220.2	5100		
		9-03-69	118.9	234.3	5100		
3S/01E-10Q02M	368.7	10-02-68	119.5	249.2	5100		
		11-06-68	109.7	259.0	5100		
		12-04-68	119.5	249.2	5100		
		1-02-69	121.8	246.9	5100		
		2-05-69	114.5	254.2	5100		
		3-05-69	107.0	261.7	5100		
		4-02-69	102.9	265.8	5100		
		5-08-69	106.6	262.1	5100		
		6-04-69 (1)	114.5	254.2	5100		
		7-02-69 (1)	126.9	241.8	5100		
		8-06-69 (1)	135.6	233.1	5100		
		9-03-69 (1)	137.5	231.2	5100		
3S/01E-11H01M	372.9	10-00-68	133.5	239.4	5100		
		4-00-69	117.5	255.4	5100		
3S/01E-17R01M	347.0	10-02-68	117.8	229.2	5100		
		11-06-68	116.8	230.2	5100		
		12-04-68	(6)		5100		
3S/01E-19A03M	328.0	10-02-68	113.5	214.5	5100		
		11-06-68	107.7	220.3	5100		
		12-04-68	106.9	221.1	5100		
		1-02-69	103.1	224.9	5100		
		2-05-69	99.7	228.3	5100		
		3-05-69	98.9	229.1	5100		
		4-02-69	97.2	230.8	5100		
		5-08-69	94.4	233.6	5100		
		6-04-69	92.2	235.8	5100		
		7-02-69	93.7	234.3	5100		
		8-06-69	98.6	229.4	5100		
		9-03-69	95.2	232.8	5100		
3S/02E-10H01M	551.0	10-00-68	100.1	450.9	5100		
		4-00-69	96.3	454.7	5100		
3S/02E-16E02M	508.0	10-02-68	101.9	406.1	5100		
		11-06-68	101.9	406.1	5100		
		12-04-68	98.9	409.1	5100		
		1-02-69	98.8	409.2	5100		
		2-05-69	96.4	411.6	5100		
		3-05-69	92.9	415.1	5100		
		4-02-69	95.4	412.6	5100		
		5-08-69	93.4	414.6	5100		
		6-04-69	97.4	410.6	5100		
		7-02-69	105.3	402.7	5100		
		8-06-69 (1)	132.9	375.1	5100		
		9-03-69	100.1	407.9	5100		

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
LIVERMORE VALLEY 2-10.00 (Continued)						PASCADERO VALLEY 2-26.00					
3S/02E-19D01M	411.6	10-02-68	193.0	218.6	5100	6S/05W-09H01M	20.0	10-17-68	4.7	15.3	5050
		11-06-68	184.0	227.6	5100			11-20-68	4.5	15.5	5050
		12-04-68	182.8	228.8	5100			12-17-68	4.0	16.0	5050
		1-02-69	177.7	233.9	5100			1-22-69	1.5	18.5	5050
		2-05-69	168.8	242.8	5100			2-20-69	3.0	17.0	5050
		3-05-69	157.9	253.7	5100			3-17-69	3.0	17.0	5050
		4-02-69	149.9	261.7	5100			4-16-69	3.3	16.7	5050
		5-08-69	148.5	263.1	5100			5-13-69	3.6	16.4	5050
		6-04-69	155.7	255.9	5100			6-17-69	3.9	16.1	5050
		7-02-69	162.0	249.6	5100			7-00-69	(0)		5050
		8-06-69	175.0	236.6	5100						
		9-03-69	181.1	230.5	5100	8S/05W-10F01M	25.0	3-17-69	(8)		5050
HALF MOON BAY TERRACE 2-22.00								7-00-69	(0)		5050
5S/05W-19J01M	53.0	3-17-69	13.7	39.3	5050	8S/05W-10H01M	40.0	3-17-69	3.3	36.7	5050
		7-00-69	(0)		5050			7-00-69	(0)		5050
5S/05W-20L01M	73.0	10-17-68	20.8	52.2	5050	8S/05W-10K01M	37.0	10-17-68	18.3	18.7	5050
		11-20-68	27.8	45.2	5050			11-20-68	18.2	18.8	5050
		12-17-68	14.6	58.4	5050			12-17-68	17.7	19.3	5050
		1-22-69	19.1	53.9	5050			1-22-69	(1) 6.4	30.6	5050
		2-20-69	15.3	57.7	5050			2-20-69	3.4	33.6	5050
		3-17-69	13.8	59.2	5050			3-17-69	7.1	29.9	5050
		4-16-69	15.1	57.9	5050			4-16-69	11.9	25.1	5050
		5-13-69	16.7	56.3	5050			5-13-69	13.4	23.6	5050
		6-17-69	16.9	56.1	5050			6-17-69	15.3	21.7	5050
		7-00-69	(0)		5050			7-00-69	(0)		5050
5S/05W-29F04M	50.0	10-17-68	19.3	30.7	5050	8S/05W-11F01M	70.0	10-17-68	16.2	53.8	5050
		11-20-68	18.4	31.6	5050			11-20-68	15.0	55.0	5050
		12-17-68	17.2	32.8	5050			12-17-68	11.8	58.2	5050
		1-22-69	8.7	41.3	5050			1-22-69	5.3	64.7	5050
		2-20-69	6.1	43.9	5050			2-20-69	5.7	64.3	5050
		3-17-69	(4) 7.9	42.1	5050			3-17-69	6.6	63.4	5050
		4-16-69	9.9	40.1	5050			4-16-69	7.4	62.6	5050
		5-13-69	12.2	37.8	5050			5-13-69	9.8	60.2	5050
		6-17-69	14.7	35.3	5050			6-17-69	11.5	58.5	5050
		7-00-69	(0)		5050			7-00-69	(0)		5050
5S/05W-29N01M	46.0	3-17-69	25.9	20.1	5050	8S/05W-11K02M	60.0	3-17-69	1.9	58.1	5050
		7-00-69	(0)		5050			7-00-69	(0)		5050
5S/05W-32K01M	90.0	10-17-68	28.7	61.3	5050	8S/05W-11M01M	45.0	3-17-69	11.3	33.7	5050
		11-20-68	29.0	61.0	5050			7-00-69	(0)		5050
		12-17-68	32.3	57.7	5050	CENTRAL COASTAL REGION 3-00.00					
		1-22-69	28.3	61.7	5050	SOQUEL VALLEY 3-01.00					
		2-20-69	26.9	63.1	5050	11S/01W-09L01M	124.2	10-17-68	56.5	67.7	5050
		3-17-69	25.8	64.2	5050			11-20-68	56.1	68.1	5050
		4-16-69	24.8	65.2	5050			12-18-68	58.9	65.3	5102
		5-13-69	23.8	66.2	5050			1-22-69	56.9	67.3	5102
		6-17-69	25.7	64.3	5050			2-20-69	56.1	68.1	5050
		7-00-69	(0)		5050			3-18-69	55.1	69.1	5050
5S/06W-10J01M	35.0	3-17-69	0.5	34.5	5050			4-16-69	54.2	70.0	5050
		7-00-69	(0)		5050			5-13-69	53.3	70.9	5050
6S/05W-08A01M	108.0	10-17-68	57.2	50.8	5050			6-17-69	53.5	70.7	5050
		11-20-68	57.5	50.5	5050			7-00-69	(0)		5050
		12-20-68	58.0	50.0	5050	11S/01W-10C01M	90.0	10-17-68	61.4	28.6	5050
		2-20-69	55.2	52.8	5050			11-20-68	60.7	29.3	5050
		3-17-69	55.4	52.6	5050			12-18-68	60.7	29.3	5102
		4-16-69	55.1	52.9	5050			1-22-69	60.3	29.7	5102
		5-13-69	55.7	52.3	5050			2-20-69	59.9	30.1	5050
		6-17-69	55.4	52.6	5050			3-18-69	59.6	30.4	5050
		7-00-69	(0)		5050			4-16-69	59.4	30.6	5050
6S/05W-08B01M	108.0	10-17-68	(0)		5050			5-13-69	59.9	30.1	5050
SAN GREGORIO VALLEY 2-24.00								6-17-69	60.7	29.3	5050
7S/05W-14C01M	80.0	10-17-68	13.4	66.6	5050			7-00-69	(0)		5050
		11-20-68	12.9	67.1	5050	11S/01W-15E02M	87.0	10-17-68	55.7	31.3	5050
		12-17-68	12.5	67.5	5050			11-20-68	55.0	32.0	5050
		1-22-69	11.6	68.4	5050			12-18-68	(2) 59.9	27.1	5102
		2-20-69	9.1	70.9	5050			1-22-69	55.3	31.7	5102
		3-17-69	10.9	69.1	5050			2-20-69	54.2	32.8	5050
		4-16-69	11.3	68.7	5050			3-18-69	54.4	32.6	5050
		5-13-69	11.6	68.4	5050			4-16-69	53.8	33.2	5050
		6-17-69	11.6	68.4	5050			5-13-69	53.7	33.3	5050
		7-00-69	(0)		5050			6-17-69	57.3	29.7	5050
7S/05W-15C01M	80.0	3-17-69	2.7	77.3	5050			7-00-69	(0)		5050
		7-00-69	(0)		5050	PAJARO VALLEY 3-02.00					
7S/05W-15E01M	75.2	3-17-69	FLOW		5050	11S/02E-27A01M	141.0	10-08-68	128.5	12.5	5050
		7-00-69	(0)		5050			11-14-68	129.7	11.3	5050
7S/05W-15E02M	30.0	10-17-68	14.4	15.6	5050			1-17-69	121.8	19.2	5050
		11-20-68	14.3	15.7	5050			2-14-69	103.0	38.0	5050
		12-17-68	13.5	16.5	5050			3-06-69	117.5	23.5	5050
		1-22-69	14.1	15.9	5050			4-09-69	100.5	40.5	5050
		2-20-69	8.3	21.7	5050			5-02-69	101.5	39.5	5050
		3-17-69	11.7	18.3	5050			6-03-69	102.5	38.5	5050
		4-16-69	12.8	17.2	5050			7-02-69	104.5	36.5	5050
		5-13-69	13.6	16.4	5050			8-13-69	129.5	11.5	5050
		6-17-69	14.0	16.0	5050			9-11-69	123.6	17.4	5050
		7-00-69	(0)		5050						
7S/05W-15H02M	40.0	3-17-69	(1)		5050						
		7-00-69	(0)		5050						

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SUR- FACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SUR- FACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA						
PAJARO VALLEY 3-02.00 (Continued)						SOUTH SANTA CLARA COUNTY 3-03.01 (Continued)											
12S/01E-24G01M	9.4	10-08-68	16.5	-7.1	5050	9S/03E-22B03M	379.1	10-07-68	102.0	277.1	2400						
		11-14-68	12.6	-3.2	5050			11-13-68	101.8	277.3	2400						
		1-17-69	5.6	3.8	5050			12-06-68	96.6	282.5	2400						
		2-14-69	4.8	4.6	5050			1-14-69	96.2	282.9	2400						
		3-06-69	6.1	3.3	5050			2-10-69	86.7	292.4	2400						
		4-09-69	4.6	4.8	5050			3-10-69	57.3	321.8	2400						
		5-02-69	11.1	-1.7	5050			4-11-69	56.6	322.5	2400						
		6-03-69	15.1	-5.7	5050			5-12-69	55.3	323.8	2400						
		7-02-69	22.6	-13.2	5050			6-11-69	62.5	316.6	2400						
		8-13-69	22.1	-12.7	5050			8-12-69	68.2	310.9	2400						
9-11-69	17.8	-8.4	5050	9-02-69	69.2	309.9	2400										
12S/02E-11E04M	36.0	10-08-68	33.0	3.0	5050	9S/03E-23E01M	362.5	10-07-68	117.8	244.7	2400						
		11-14-68	27.0	9.0	5050			11-13-68	120.0	242.5	2400						
		1-17-69	24.0	12.0	5050			12-06-68	116.3	246.2	2400						
		2-14-69	20.1	15.9	5050			1-14-69	112.2	250.3	2400						
		3-06-69	19.7	16.3	5050			2-10-69	70.6	291.9	2400						
		4-09-69	19.4	16.6	5050			3-10-69	44.5	318.0	2400						
		5-02-69	24.9	11.1	5050			4-11-69	43.8	318.7	2400						
		6-03-69	13.7	22.3	5050			5-12-69	48.6	313.9	2400						
		7-02-69	21.2	14.8	5050			6-11-69	(7)		2400						
		8-13-69	20.7	15.3	5050			8-12-69	(7)		2400						
9-11-69	16.4	19.6	5050	9-15-69	(1)		2400										
12S/02E-16J01M	20.5	10-08-68	20.0	0.5	5050	9S/03E-26P01M	329.1	10-07-68	(4) 90.3	238.8	2400						
		11-14-68	17.6	2.9	5050			11-13-68	83.8	245.3	2400						
		1-17-68	13.5	7.0	5050			12-06-68	85.7	243.4	2400						
		2-14-69	(9)		5050			1-14-69	82.3	246.8	2400						
		3-06-69	(9)		5050			2-11-69	62.2	266.9	2400						
		4-09-69	(9)		5050			3-10-69	30.0	299.1	2400						
		5-02-69	(1)		5050			4-11-69	28.3	300.8	2400						
		6-03-69	(1)		5050			5-09-69	33.4	295.7	2400						
		7-02-69	(9)		5050			6-11-69	54.6	274.5	2400						
		8-13-69	26.3	-5.8	5050			8-12-69	51.5	277.6	2400						
9-11-69	26.1	-5.6	5050	9-15-69	49.4	279.7	2400										
12S/02E-31K01M	30.0	12-05-68	31.0	-1.0	2100	9S/03E-27C02M	347.0	10-07-68	84.2	262.8	2400						
13S/01E-01A01M	5.0	10-21-68	4.7	0.3	2100	11-13-68	87.6	259.4	2400								
		3-19-69	0.0	5.0	2100	12-06-68	82.7	264.3	2400								
		9-18-69	4.2	0.8	2100	1-14-69	78.8	268.2	2400								
13S/02E-05B01M	136.0	10-08-68	138.6	-2.6	5050	2-11-69	54.4	292.6	2400								
		11-14-68	140.6	-4.6	5050	3-10-69	33.2	313.8	2400								
		1-17-69	136.6	-0.6	5050	4-11-69	31.7	315.3	2400								
		2-14-69	136.6	-0.6	5050	5-12-69	33.8	313.2	2400								
		3-06-69	134.6	1.4	5050	6-11-69	44.4	302.6	2400								
		4-09-69	133.6	2.4	5050	7-08-69	46.0	301.0	2400								
		5-02-69	132.6	3.4	5050	8-12-69	51.7	295.3	2400								
		6-03-69	134.6	1.4	5050	9-15-69	49.4	297.6	2400								
		7-02-69	(9)		5050	9S/03E-29B01M	397.6	4-08-69	1.1	396.5	5050						
		8-13-69	(2)		5050							9S/03E-34D02M	327.0	10-07-68	72.7	254.3	2400
9-11-69	(7)		5050	11-13-68	68.9									258.1	2400		
13S/02E-06B01M	15.0	10-08-68	19.6	-4.6	5050									12-06-68	63.6	263.4	2400
		11-14-68	17.2	-2.2	5050									1-14-69	62.7	264.3	2400
		1-17-69	(9)		5050									2-11-69	43.6	283.4	2400
		2-14-69	(9)		5050									3-10-69	20.3	306.7	2400
		3-06-69	10.7	4.3	5050									4-11-69	19.8	307.2	2400
		4-09-69	(9)		5050									5-09-69	23.4	303.6	2400
		5-02-69	11.8	3.2	5050									6-11-69	(7)		2400
		6-03-69	(9)		5050	8-12-69	29.2	297.8	2400								
		7-02-69	15.1	-0.1	5050	9-15-69	40.8	286.2	2400								
		8-13-69	18.0	-3.0	5050	9S/03E-34Q01M	314.2	10-07-68	59.3	254.9	2400						
9-11-69	18.4	-3.4	5050	11-13-68	60.2			254.0	2400								
13S/02E-06C01M	26.0	10-21-68	27.2	-1.2	2100			12-06-68	50.3	263.9	2400						
		3-19-69	19.5	6.5	2100			1-14-69	52.6	261.6	2400						
		7-18-69	24.5	1.5	2100			2-13-69	24.4	289.8	2400						
13S/02E-06E02M	27.8	11-15-68	27.0	0.8	2100			3-11-69	12.4	301.8	2400						
		3-19-69	20.0	7.8	2100			4-11-69	13.2	301.0	2400						
		9-18-69	27.0	0.8	2100			5-09-69	15.8	298.4	2400						
13S/02E-06E03M	30.0	10-21-68	(1)		2100			6-11-69	23.7	290.5	2400						
		11-15-68	28.8	1.2	2100			8-12-69	29.2	285.0	2400						
		3-19-69	25.8	4.2	2100	9-15-69	30.6	283.6	2400								
		7-18-69	32.6	-2.6	2100	9S/03E-36E02M	309.3	10-07-68	88.3	221.0	2400						
		8-21-69	(1)		2100			11-13-68	77.1	232.2	2400						
		9-18-69	(1)		2100			12-06-68	79.7	229.6	2400						
GILROY-HOLLISTER VALLEY 3-03.00	SOUTH SANTA CLARA COUNTY 3-03.01	9S/03E-16J01M	385.7	10-04-68	(1)				2400	1-14-69	78.4	230.9	2400				
				11-13-68	107.4			278.3	2400	2-13-69	61.3	248.0	2400				
				12-06-68	109.8			275.9	2400	3-11-69	37.4	271.9	2400				
				1-13-69	107.3			278.4	2400	4-11-69	43.8	265.5	2400				
				2-10-69	85.8			299.9	2400	5-09-69	38.8	270.5	2400				
				3-10-69	63.2			322.5	2400	6-11-69	56.6	252.7	2400				
				4-11-69	64.8			320.9	2400	8-11-69	54.0	255.3	2400				
				5-12-69	62.6	323.1	2400	9-15-69	59.8	249.5	2400						
				6-12-69	70.8	314.9	2400	9S/03E-36F03M	322.0	10-07-68	103.7	218.3	2400				
				7-08-69	80.5	305.2	2400			11-13-68	95.0	227.0	2400				
8-12-69	77.2	308.5	2400	12-06-68	97.8	224.2	2400										
9-15-69	84.6	301.1	2400	1-14-69	95.5	226.5	2400										
9S/03E-21K02M	361.6	10-07-68	88.3	273.3	2400	2-11-69	78.5			243.5	2400						
		11-13-68	87.9	273.7	2400	3-11-69	63.4			258.6	2400						
		12-06-68	83.3	278.3	2400	4-10-69	59.7			262.3	2400						
		1-14-69	79.4	282.2	2400	5-09-69	62.6			259.4	2400						
		2-10-69	60.1	301.5	2400	6-11-69	(7)				2400						
		3-10-69	39.4	322.2	2400	8-11-69	(7)				2400						
		4-11-69	40.7	320.9	2400	9-15-69	79.2	242.8	2400								
		5-12-69	38.5	323.1	2400	10S/03E-02K03M	290.0	10-07-68	57.4	232.6	5050						
		6-12-69	45.4	316.2	2400			11-13-68	62.7	227.3	5050						
		8-12-69	57.8	303.8	2400			1-16-69	55.7	234.3	5050						
9-15-69	(1)		2400	2-13-69	27.5			262.5	5050								
				3-05-69	20.2			269.8	5050								
				4-08-69	21.6			268.4	5050								
				5-01-69	26.3			263.7	5050								
				6-02-69	32.2			257.8	5050								
				7-01-69	37.2			252.8	5050								
				8-13-69	(1)				5050								
				9-11-69	40.8	249.2	5050										

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA								
SOUTH SANTA CLARA COUNTY 3-03.01 (Continued)						SOUTH SANTA CLARA COUNTY 3-03.01 (Continued)													
10S/03E-13J03M	251.0	10-07-68	55.6	195.4	5050	11S/04E-08K02M (Continued)	179.0	5-01-69	11.2	167.8	5050								
		11-13-68	52.6	198.4	5050			6-02-69	16.8	162.2	5050								
		1-16-69	48.9	202.1	5050			7-01-69	24.7	154.3	5050								
		2-13-69	29.8	221.2	5050			8-13-69	29.2	149.8	5050								
		3-05-69	21.6	229.4	5050			9-11-69	28.4	150.6	5050								
		4-08-69	18.6	232.4	5050			SAN BENITO COUNTY 3-03.02											
		5-01-69	(1)		5050			11S/05E-13D01M	255.7	10-07-68	36.4	219.3	5050						
		6-02-69	(1)		5050					11-13-68	41.6	214.1	5050						
		7-01-69	(1)		5050					1-16-69	42.9	212.8	5050						
		8-13-69	(1)		5050					2-13-69	34.9	220.8	5050						
		9-11-69	37.9	213.1	5050					3-05-69	18.6	237.1	5050						
10S/03E-36E03M						12S/04E-20C01M													
10S/03E-36E03M	220.0	10-07-68	36.0	184.0	5050	12S/05E-10R01M	211.6			10-07-68	86.1	125.5	5050						
		11-13-68	36.7	183.3	5050					11-13-68	91.2	120.4	5050						
		1-16-69	36.6	183.4	5050					1-16-69	86.3	125.3	5050						
		2-13-69	(7)		5050					2-13-69	81.7	129.9	5050						
		3-05-69	31.7	188.3	5050					3-05-69	60.6	151.0	5050						
		4-08-69	26.6	193.4	5050			4-08-69	67.6	144.0	5050								
		5-01-69	24.9	195.1	5050			5-01-69	77.1	134.5	5050								
		6-02-69	26.9	193.1	5050			6-02-69	83.1	128.5	5050								
		7-01-69	(1)		5050			7-01-69	85.2	126.4	5050								
		8-13-69	35.6	184.4	5050			8-12-69	83.6	128.0	5050								
		9-11-69	34.0	186.0	5050			9-11-69	85.8	125.8	5050								
10S/04E-18G02M						12S/05E-12M04M													
10S/04E-18G02M	259.5	10-07-68	69.6	189.9	5050	12S/05E-33A01M	280.0	10-07-68	86.4	193.6	5050								
		11-13-68	68.2	191.3	5050			11-13-68	98.0	182.0	5050								
		1-16-69	63.8	195.7	5050			1-16-69	93.9	186.1	5050								
		2-13-69	48.0	211.5	5050			2-13-69	93.7	186.3	5050								
		3-05-69	39.8	219.7	5050			3-05-69	86.0	194.0	5050								
		4-08-69	35.4	224.1	5050			4-08-69	79.9	200.1	5050								
		5-01-69	39.4	220.1	5050			5-01-69	79.5	200.5	5050								
		6-02-69	43.2	216.3	5050			6-02-69	(1)		5050								
		7-01-69	49.3	210.2	5050			7-01-69	86.5	193.5	5050								
		8-13-69	51.2	208.3	5050			8-12-69	(1)		5050								
		9-11-69	55.4	204.1	5050			9-11-69	87.8	192.2	5050								
10S/04E-31G04M						12S/05E-35N02M													
10S/04E-31G04M	197.5	10-21-68	45.5	152.0	5200	12S/05E-35N02M	303.0	10-07-68	134.4	168.6	5050								
		11-18-68	43.5	154.0	5200			11-13-68	125.4	177.6	5050								
		12-16-68	45.5	152.0	5200			1-16-69	117.4	185.6	5050								
		1-20-69	40.5	157.0	5200			2-13-69	116.4	186.6	5050								
		2-17-69	28.5	169.0	5200			3-05-69	114.4	188.6	5050								
		3-17-69	21.5	176.0	5200			4-08-69	111.4	191.6	5050								
		4-21-69	21.5	176.0	5200			5-01-69	104.4	198.6	5050								
		5-19-69	24.5	173.0	5200			6-02-69	(1)		5050								
		6-16-69	31.5	165.0	5200			7-01-69	120.4	182.6	5050								
		7-22-69	39.5	158.0	5200			8-12-69	(1)		5050								
		8-18-69	41.5	156.0	5200			9-11-69	127.2	175.8	5050								
1-15-69	41.5	156.0	5200	13S/05E-11Q01M															
10S/04E-35E01M						SALINAS VALLEY 3-04.00													
10S/04E-35E01M	248.0	4-08-69	68.0	180.0	5050	PRESSURE AREA 180 FOOT AQUIFER 3-04.01													
11S/04E-06B01M						14S/02E-03C01M													
11S/04E-06B01M	197.2	10-21-68	53.0	144.2	5200	14S/02E-03C01M	10.6	11-27-68	18.1	-7.5	2100								
		11-18-68	47.0	150.2	5200			15S/02E-01Q01M	42.0	10-17-68	(1)		2100						
		12-16-68	51.0	146.2	5200					11-20-68	39.7	2.3	2100						
		1-20-69	44.0	153.2	5200					12-17-68	37.0	5.0	2100						
		2-17-69	31.0	166.2	5200					1-24-69	31.7	10.3	2100						
		3-17-69	25.0	172.2	5200					2-17-69	31.6	10.4	2100						
		4-21-69	26.0	171.2	5200					3-19-69	28.7	13.3	2100						
		5-19-69	31.0	166.2	5200					4-15-69	38.1	3.9	2100						
		6-16-69	42.0	155.2	5200					5-13-69	(1)		2100						
		7-22-69	39.0	158.2	5200					6-16-69	42.5	-0.5	2100						
		8-18-69	47.0	150.2	5200					7-14-69	(1)		2100						
9-15-69	46.0	151.2	5200	8-18-69	(1)		2100												
11S/04E-06D01M						15S/03E-16M01M													
11S/04E-06D01M	211.0	10-21-68	65.0	146.0	5200	15S/03E-16M01M	58.0	10-18-68	(1)		2100								
		11-18-68	59.0	152.0	5200			11-20-68	43.5	14.5	2100								
		12-16-68	61.0	150.0	5200			3-20-69	29.0	29.0	2100								
		1-20-69	53.0	158.0	5200			9-15-69	62.5	-4.5	2100								
		2-17-69	40.0	171.0	5200			15S/04E-33A01M											
		3-17-69	37.0	174.0	5200			15S/04E-33A01M	125.0	12-06-68	84.1	40.9	2100						
		4-21-69	37.0	174.0	5200					16S/04E-11D01M	110.0	12-05-68	49.7	60.3	2100				
		5-19-69	40.0	171.0	5200							PRESSURE AREA 400 FOOT AQUIFER 3-04.01							
		6-16-69	45.0	166.0	5200							13S/02E-31Q01M	11.0	11-25-68	13.5	-2.5	2100		
		7-22-69	49.0	162.0	5200														
		8-18-69	55.0	156.0	5200														
9-15-69	57.0	154.0	5200																
11S/04E-06H01M																			
11S/04E-06H01M	191.5	10-21-68	46.0	145.5	5200														
		11-18-68	45.0	146.5	5200														
		12-16-68	45.0	146.5	5200														
		1-20-69	37.0	154.5	5200														
		2-17-69	25.0	166.5	5200														
		3-17-69	22.0	169.5	5200														
		4-21-69	23.0	168.5	5200														
		5-19-69	27.0	164.5	5200														
		6-16-69	30.0	161.5	5200														
		7-22-69	39.0	152.5	5200														
		8-18-69	42.0	149.5	5200														
9-15-69	41.0	150.5	5200																
11S/04E-06P02M																			
11S/04E-06P02M	201.7	10-21-68	57.0	144.7	5200														
		11-18-68	52.0	149.7	5200														
		12-16-68	54.0	147.7	5200														
		1-20-69	45.0	156.7	5200														
		2-17-69	33.0	168.7	5200														
		3-17-69	29.0	172.7	5200														
		4-21-69	31.0	170.7	5200														
		5-19-69	34.0	167.7	5200														
		6-16-69	36.0	165.7	5200														
		7-22-69	39.0	162.7	5200														
		8-18-69	51.0	150.7	5200														
9-15-69	50.0	151.7	5200																
11S/04E-08K02M																			
11S/04E-08K02M	179.0	10-07-68	36.2	142.8	5050														
		11-13-68	35.7	143.3	5050														
		1-16-69	26.9	152.1	5050														
		2-13-69	15.2	163.8	5050														
		3-05-69	8.4	170.6	5050														
		4-08-69	10.1	168.9	5050														

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA		
PRESSURE AREA 400 FOOT AQUIFER 3-04.01 (Continued)						PASO ROBLES BASIN 3-04.06 (Continued)							
14S/03E-18J01M	69.0	10-18-68	89.9	-20.9	2100	25S/11E-35G01M	895.0	10-23-68	62.5	832.5	5117		
		11-20-68	77.0	-8.0	2100	4-07-69		60.0	835.0	5117			
		12-17-68	75.0	-6.0	2100	25S/11E-36N02M	837.5	10-23-68	54.1	783.4	5117		
		1-24-69	67.7	1.3	2100			4-07-69	42.9	794.6	5117		
		2-17-69	65.0	4.0	2100	25S/12E-17J01M	640.0	10-24-68	62.0	578.0	5117		
		3-18-69	63.1	5.9	2100			4-07-69 (8)	41.5	598.5	5117		
		4-15-69	66.0	3.0	2100			25S/12E-17R01M	640.0	10-24-68	58.7	581.3	5117
		5-13-69	81.6	-12.6	2100					4-07-69 (1)	(1)	(1)	5117
		6-16-69	90.0	-21.0	2100			25S/12E-26K01M	749.0	10-24-68	(1)	(1)	5117
		7-14-69	96.0	-27.0	2100	4-24-69 (7)	(7)			(7)	5117		
		8-18-69	97.2	-28.2	2100	25S/12E-28N01M	639.0	10-24-68	23.3	615.7	5117		
9-15-69	(1)	(1)	2100	5-01-69 (1)	(1)			(1)	5117				
EAST SIDE AREA 3-04.02						25S/13E-11E01M	1185.0	10-24-68	59.2	1125.8	5117		
16S/05E-17R01M	181.0	12-05-68	109.1	71.9	2100			4-24-69	57.2	1127.8	5117		
ARROYO SECO CONE 3-04.04						25S/13E-19R01M	915.0	10-24-68	177.4	737.6	5117		
18S/06E-15M01M	277.0	10-18-68	101.7	175.3	2100			4-24-69	177.4	737.6	5117		
		12-18-68	99.0	178.0	2100	25S/16E-17L01M	1164.5	10-08-68	29.1	1135.4	5117		
		1-17-69	95.5	181.5	2100			26S/12E-04N01M	675.0	10-23-68	48.3	626.7	5117
		2-18-69	80.6	196.4	2100	4-07-69	41.2			633.8	5117		
		3-19-69	82.2	194.8	2100	26S/12E-26E01M	840.0	4-08-69	190.2	649.8	5117		
		4-17-69	83.6	193.4	2100			26S/13E-05P01M	740.0	10-24-68	19.5	720.5	5117
		5-20-69	87.0	190.0	2100	4-24-69	15.9			724.1	5117		
		6-17-69	88.0	189.0	2100	26S/13E-10D01M	800.0	4-24-69	11.6	788.4	5117		
		7-15-69	92.3	184.7	2100			26S/14E-17L01M	949.0	10-23-68	28.6	920.4	5117
		8-19-69	93.2	183.8	2100	4-25-69	12.3			936.7	5117		
		9-17-69	94.0	183.0	2100	26S/14E-18Q01M	930.0	10-23-68	33.8	896.2	5117		
UPPER VALLEY AREA 3-04.05								4-25-69	19.3	910.7	5117		
19S/06E-11C01M	373.0	10-18-68	185.1	187.9	2100	26S/14E-24B01M	1000.0	10-17-68	56.5	943.5	5117		
		11-22-68	183.2	189.8	2100			4-25-69	42.5	957.5	5117		
		12-18-68	190.6	182.4	2100	26S/14E-35D01M	1135.0	4-18-69	116.0	1019.0	5117		
		1-16-69	169.0	204.0	2100			26S/15E-16P02M	1047.0	11-18-68	23.7	1023.3	5117
		2-17-69	157.4	215.6	2100	4-25-69	16.9			1030.1	5117		
		3-18-69	150.5	222.5	2100	26S/15E-21P01M	1072.0	11-18-68	40.9	1031.1	5117		
		4-16-69	(1)	(1)	2100			4-25-69	39.4	1032.6	5117		
		5-21-69	(1)	(1)	2100	26S/15E-28Q01M	1090.0	11-18-68	54.1	1035.9	5117		
		6-18-69	(1)	(1)	2100			4-25-69	55.2	1034.8	5117		
		7-16-69	(1)	(1)	2100	26S/15E-29N01M	1133.0	10-17-68	97.8	1035.2	5117		
		8-20-69	(1)	(1)	2100			4-18-69	73.3	1059.7	5117		
9-16-69	(1)	(1)	2100	27S/12E-04P04M	701.0	10-22-68	19.2	681.8	5117				
PASO ROBLES BASIN 3-04.06						4-24-69	12.5	688.5	5117				
19S/07E-10P01M	315.0	10-17-68	82.1	232.9	2100	27S/12E-21C01M	741.0	10-21-68	18.4	722.6	5117		
		11-21-68	80.9	234.1	2100			4-24-69	8.2	732.8	5117		
		12-17-68	81.8	233.2	2100	27S/13E-24N01M	1030.0	10-04-68	46.6	983.4	5117		
		1-16-69	79.6	235.4	2100			4-18-69	5.3	1024.7	5117		
		2-17-69	77.0	238.0	2100	27S/13E-33L01M	1180.0	10-03-68	129.0	1051.0	5117		
		3-18-69	78.7	236.3	2100			4-18-69	109.7	1070.3	5117		
		4-16-69	(1)	(1)	2100	27S/15E-03E01M	1120.0	11-18-68	60.1	1059.9	5117		
		5-21-69	91.3	223.7	2100			4-25-69	51.7	1068.3	5117		
		6-18-69	87.5	227.5	2100	27S/15E-10R02M	1130.0	11-18-68	65.5	1064.5	5117		
		7-16-69	95.0	220.0	2100			4-25-69	(5)	(5)	5117		
		8-20-69	95.8	219.2	2100	27S/16E-07P01M	1225.0	11-18-68	68.6	1156.4	5117		
9-16-69	97.3	217.7	2100	4-25-69	59.4			1165.6	5117				
20S/08E-05R01M	337.0	10-17-68	66.6	270.4	2100	27S/16E-35Q01M	1281.0	11-19-68	13.8	1267.2	5117		
		11-21-68	67.5	269.5	2100			4-25-69	11.1	1269.9	5117		
		12-17-68	63.9	273.1	2100	28S/12E-10R02M	805.0	10-21-68	34.1	770.9	5117		
		1-16-69	63.0	274.0	2100			4-24-69	10.2	794.8	5117		
		2-17-69	(8)	(8)	2100	28S/12E-25R01M	877.0	10-22-68	24.0	853.0	5117		
		3-18-69	61.8	275.2	2100			4-24-69	10.1	866.9	5117		
		4-16-69	(1)	(1)	2100	28S/13E-04K01M	1199.5	4-18-69	30.6	1168.9	5117		
		5-21-69	(1)	(1)	2100			28S/13E-04K02M	1195.0	4-18-69	83.5	1111.5	5117
		6-18-69	(1)	(1)	2100	10-22-68	18.0			866.8	5117		
		7-16-69	75.6	261.4	2100	4-24-69	2.8	882.0	5117				
		8-20-69	(1)	(1)	2100	28S/16E-23M01M	1440.0	11-19-68	(9)	(9)	5117		
9-16-69	(1)	(1)	2100	4-29-69	17.3			1422.7	5117				
21S/09E-07J02M	364.0	10-17-68	25.2	338.8	2100	29S/13E-05F03M	915.6	10-22-68	18.5	897.1	5117		
		11-22-68	25.0	339.0	2100			4-24-69	12.3	903.3	5117		
		12-17-68	24.7	339.3	2100	29S/13E-05K02M	928.5	10-22-68	15.3	913.2	5117		
		1-16-69	24.6	339.4	2100			4-24-69	7.2	921.3	5117		
		2-17-69	20.0	344.0	2100	29S/13E-06A01M	920.0	10-22-68 (4)	77.3	842.7	5117		
		3-18-69	17.2	346.8	2100			4-24-69	27.6	892.4	5117		
		4-16-69	(1)	(1)	2100	PASO ROBLES BASIN 3-04.06 (Continued)							
		5-21-69	19.5	344.5	2100	24S/11E-25N01M	603.3	3-28-69	40.8	562.5	5117		
		6-18-69	20.9	343.1	2100	24S/11E-33R01M	565.0	3-28-69	30.0	535.0	5117		
		7-16-69	21.3	342.7	2100	24S/11E-35D01M	572.1	3-28-69	30.0	542.1	5117		
		8-20-69	(1)	(1)	2100	24S/11E-35J01M	616.8	10-22-68	63.0	553.8	5117		
9-16-69	24.0	340.0	2100	4-07-69 (9)	5117	4-07-69 (9)	(9)	(9)	5117				
21S/10E-32N01M	400.0	11-25-68	21.7	378.3	2100	24S/15E-27L01M	1211.5	10-08-68	43.5	1168.0	5117		
		11-25-68	71.0	401.0	2100	4-18-69 (9)	5117	4-18-69 (9)	(9)	(9)	5117		
		PASO ROBLES BASIN 3-04.06						24S/15E-33C02M	1225.0	10-08-68 (4)	48.6	1176.4	5117

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA		
PASO ROBLES BASIN 3-04.06 (Continued)													
29S/13E-08M01M	945.0	10-22-68	11.9	933.1	5117								
		3-16-69	4.0	941.0	5117								
		4-01-69	7.0	938.0	5117								
29S/13E-19H01M	1002.1	10-22-68	12.7	989.4	5117								
		4-01-69	3.9	998.2	5117								
SEASIDE AREA 3-04.08													
14S/02E-31M01M	119.9	11-08-68	126.6	-6.7	5005								
		12-19-68	122.8	-2.9	5005								
		2-13-69	121.5	-1.6	5005								
		3-19-69	121.5	-1.6	5005								
		4-16-69	122.3	-2.4	5005								
		5-14-69	125.4	-5.5	5005								
		6-19-69	128.3	-8.4	5005								
		7-16-69	129.1	-9.2	5005								
		8-20-69	130.0	-10.1	5005								
		9-18-69	128.1	-8.2	5005								
15S/01E-14N01M	144.6	12-19-68	114.0	30.6	5005								
		2-13-69	112.2	32.4	5005								
		3-19-69	114.5	30.1	5005								
		4-16-69	116.2	28.4	5005								
		5-14-69	120.6	24.0	5005								
		6-19-69	124.4	20.2	5005								
		7-16-69	122.2	22.4	5005								
		8-20-69	123.7	20.9	5005								
		9-18-69	124.3	20.3	5005								
CARMEL VALLEY 3-07.00													
16S/01E-16L01M	75.0	10-21-68	(4)		2100								
		11-15-68	18.6	56.4	2100								
		12-18-68	20.1	54.9	2100								
		2-18-69	13.3	61.7	2100								
		3-19-69	(4)		2100								
		4-17-69	14.3	60.7	2100								
		5-23-69	17.1	57.9	2100								
		6-20-69	17.6	57.4	2100								
		7-18-69	18.4	56.6	2100								
		8-21-69	18.7	56.3	2100								
		9-18-69	(1)		2100								
		16S/01E-22E01M	82.0	10-21-68	31.0	51.0	2100						
				11-15-68	31.3	50.7	2100						
12-18-68	34.5			47.5	2100								
2-18-69	(9)				2100								
3-19-69	27.0			55.0	2100								
4-17-69	26.3			55.7	2100								
5-23-69	23.3			58.7	2100								
6-20-69	24.9			57.1	2100								
7-18-69	(1)				2100								
8-21-69	27.1			54.9	2100								
9-18-69	27.5	54.5	2100										
16S/01E-23F01M	109.0	10-21-68	32.0	77.0	2100								
		11-15-68	33.5	75.5	2100								
		12-18-68	41.4	67.6	2100								
		2-18-69	33.1	75.9	2100								
		3-19-69	23.8	85.2	2100								
		4-17-69	23.3	85.7	2100								
		5-23-69	26.1	82.9	2100								
		6-20-69	26.3	82.7	2100								
		7-18-69	27.0	82.0	2100								
		8-21-69	27.5	81.5	2100								
9-18-69	29.0	80.0	2100										
16S/01E-25B01M	140.0	10-21-68	(1)		2100								
		11-15-68	19.6	120.4	2100								
		12-18-68	22.1	117.9	2100								
		2-18-69	16.5	123.5	2100								
		3-19-69	13.0	127.0	2100								
		4-17-69	14.3	125.7	2100								
		5-23-69	15.1	124.9	2100								
		6-20-69	(1)		2100								
		7-18-69	16.5	123.5	2100								
		8-21-69	17.0	123.0	2100								
9-18-69	18.5	121.5	2100										
WEST SANTA CRUZ TERRACE 3-26.00													
11S/02W-21E01M	65.0	11-21-68	58.7	6.3	5050								
		12-18-68	58.8	6.2	5102								
		7-00-69	(0)		5050								
11S/02W-22K01M	30.0	11-21-68	(6)		5050								

Appendix D

SURFACE WATER QUALITY

INTRODUCTION

This appendix contains surface water quality data collected from October 1, 1968, through September 30, 1969. The data were collected from 129 stream and estuarine stations in the Central Coastal Area by the U. S. Bureau of Reclamation and the Department of Water Resources. Only those stations from which data are collected routinely are shown on Figure D-1. The U. S. Bureau of Reclamation data were collected for its Delta-San Luis Drainage Surveillance Program and are basically confined to the Sacramento-San Joaquin Delta and Suisun Bay, the latter being included in this report.

The Department of Water Resources Laboratory uses procedures from "Standard Methods for the Examination of Water and Wastewater", 12th Edition, 1967, for the determination of mineral, nutrient, and biological constituents. Pesticides are determined in accordance with the "Guide to the Analysis of Pesticide Residues", U. S. Department of Health, Education and Welfare, 1965.

The U. S. Air Force at McClellan Air Force Base provides laboratory services for the Bureau of Reclamation. It uses procedures in accordance with the "FWPCA Methods for Chemical Analysis of Water and Wastes", November 1968, for all parameters.

Two numbering systems are used in this bulletin for identifying water quality stations. The first is for those stations for which the flow of water can be measured readily, as in streams and rivers. This system is described in Department of Water Resources Bulletin No. 157, "Index of Stream Gaging Stations in and Adjacent to California", which will be published in 1970.

The second numbering system is used for those stations located in broad water bodies. This system is described as follows: The first two digits identify the hydrologic basin as in the first system. The third digit identifies the type of water body being identified, and for this publication is a "B" for Bay, "D" for Delta, "O" for Ocean, and "S" for Slough. The next digit is the last digit of the latitude in degrees, "3" for 33°, or "9" for 29°. The next three digits are the minutes of latitude to the tenth of a minute. The last four digits are longitude in the same manner as latitude.

Example: E0 B 807.3 145.6

E0	San Francisco Bay
B	Water Body -- Bay
8	28° Latitude
07.3	07.3 Minutes Latitude
1	121° Longitude
45.6	45.6 Minutes Longitude

SURFACE WATER MEASUREMENT STATIONS

Hydrographic Area BSacramento-San Joaquin Delta (B9)

B9 1110 Sacramento River at Collinsville

Hydrographic Area ESan Francisco Bay (E0)

E0 3300 Suisun Bay at Benicia

Napa-Solano (E3)

E3 1400 Rector Reservoir near Yountville

SURFACE WATER QUALITY STATIONS

Hydrographic Area DSanta Cruz (D0)

D0 1200.00 San Lorenzo River at Big Trees

D0 3100.00 Soquel Creek at Soquel

Pajaro-San Benito Rivers (D1)

D1 1250.00 Pajaro River at Chittenden

D1 1371.50 Uvas Creek near Morgan Hill

D1 2450.00 San Benito River near Bear Valley
Fire StationLower Salinas River (D2)

D2 1220.00 Salinas River near Spreckels

D2 1310.10 Salinas River near Chular

D2 1325.10 Salinas River near Gonzales

D2 1450.00 Arroyo Seco near Soledad

D2 1850.00 Salinas River near Bradley

Upper Salinas River (D3)

D3 1450.00 Salinas River at Paso Robles

D3 3250.00 Nacimiento River near San Miguel

Monterey Coast (D4)

D4 1200.00 Carmel River at Robles Del Rio

Hydrographic Area ESan Francisco Bay (E0)

E0 B 736.2 211.6 San Francisco Bay at San Mateo Bridge

E0 B 748.4 228.2 San Francisco Bay at Fort Point

E0 B 749.2 222.4 San Francisco Bay at Treasure Island

E0 B 757.7 225.6 San Pablo Bay at Point San Pablo

Napa-Solano (E3)

E3 1100.50 Napa River at Dutton Landing

E3 1500.00 Napa River near St. Helena

Alameda Creek (E5)

E5 1150.00 Alameda Creek near Niles

E5 1400.00 Arroyo Del Valle near Livermore

Santa Clara Valley (E6)

E6 4250.00 Coyote Creek near Madrone

E6 5250.00 Los Gatos Creek at Los Gatos

Hydrographic Area FMendocino Coast (F8)

F8 2100.00 Navarro River near Navarro

F8 2720.00 Big River near Mouth

F8 3080.50 Noyo River near Fort Bragg

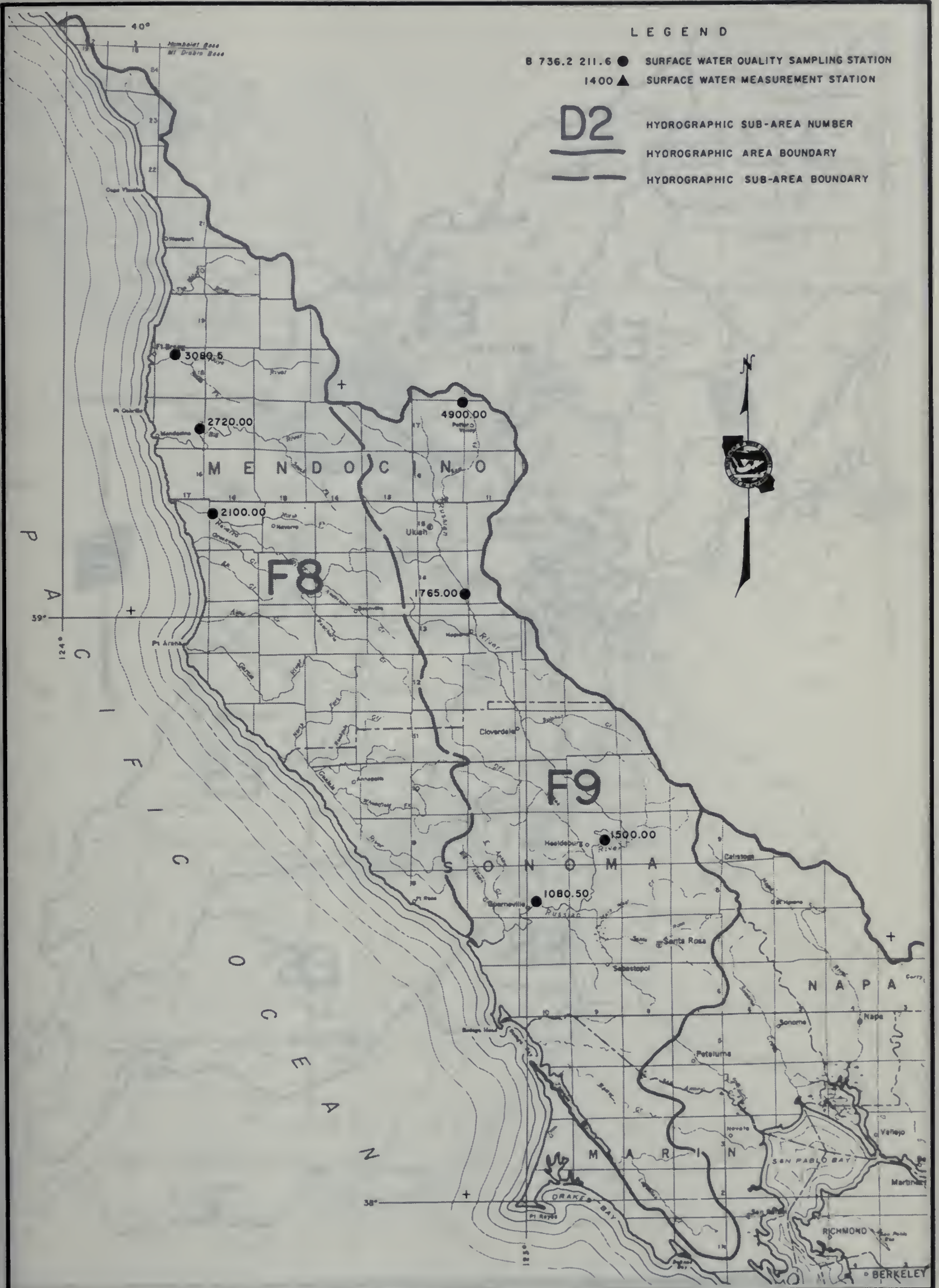
Russian River (F9)

F9 1080.50 Russian River at Guerneville

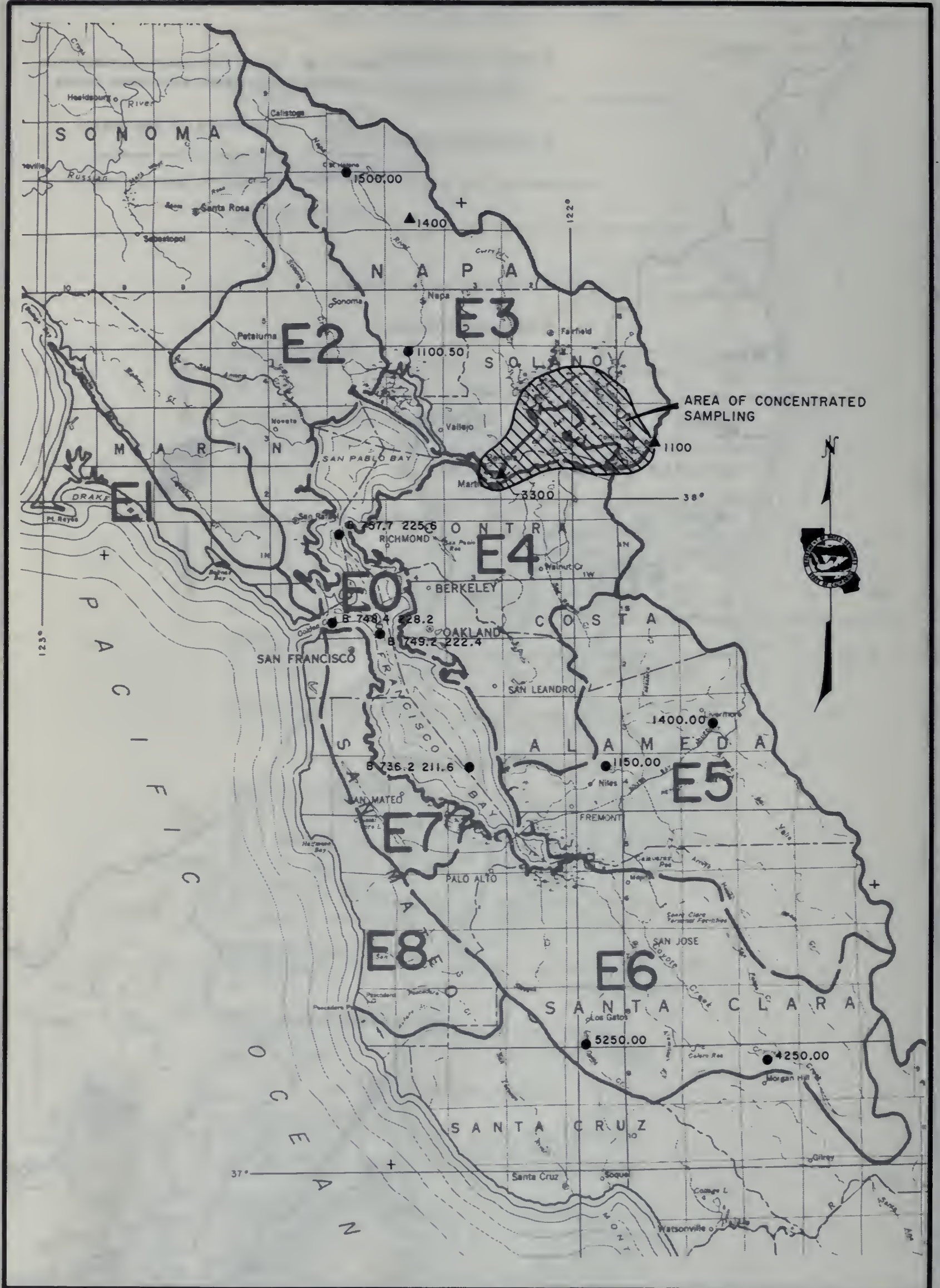
F9 1500.00 Russian River near Healdsburg

F9 1765.00 Russian River near Hopland

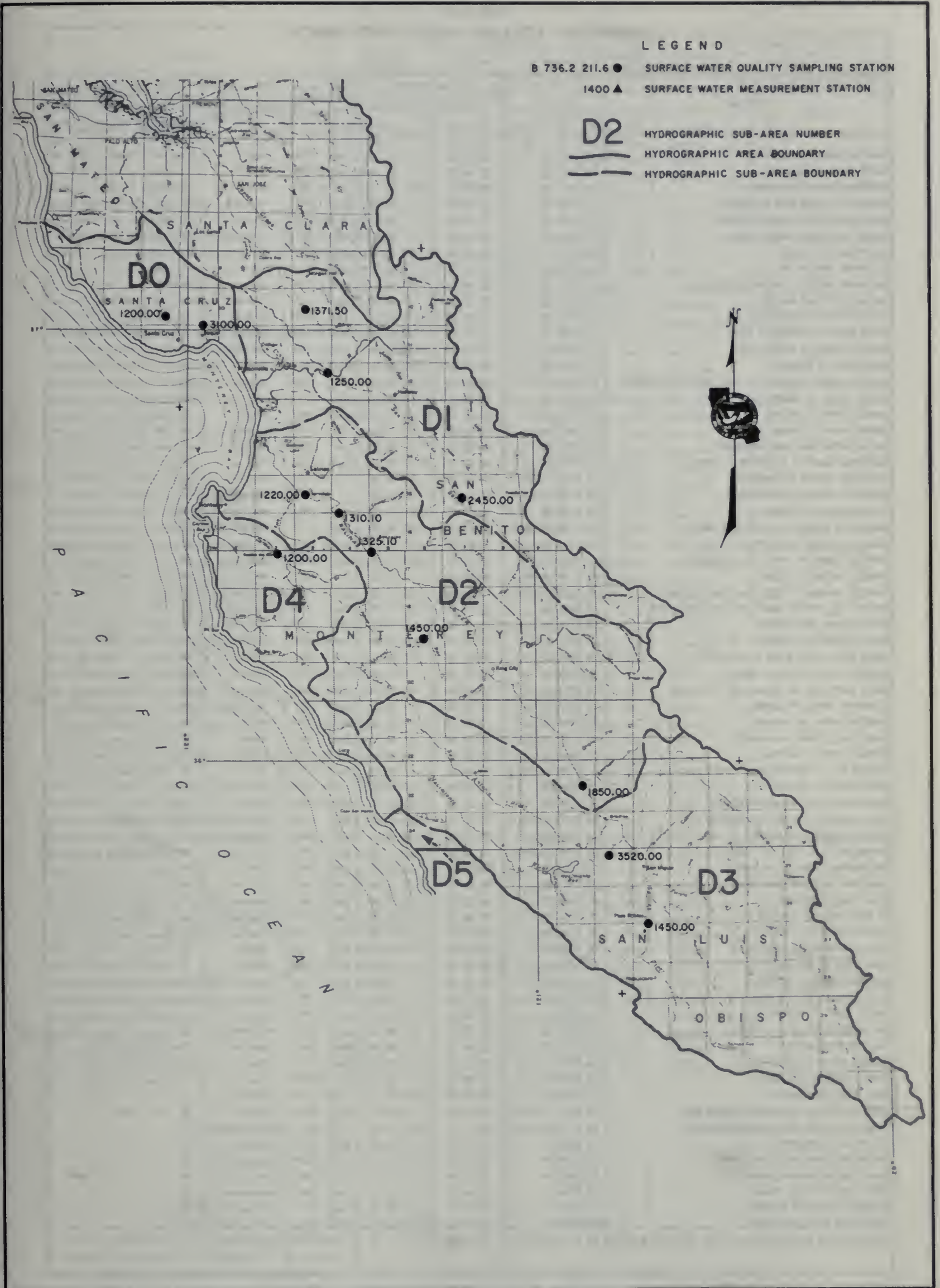
F9 4900.00 Russian River, East Fork, at
Potter Valley Powerhouse



SURFACE WATER OBSERVATION STATIONS 1967-68



SURFACE WATER OBSERVATION STATIONS 1967-68



SURFACE WATER OBSERVATION STATIONS 1967-68

TABLE D-1
SAMPLING STATION DATA AND INDEX

Station	Station Number	Location		Beginning Of Record	Frequency Of Sampling	Data on pages indicated						
		Latitude ° ' "	Longitude ° ' "			Tables						Fig.
						D-2	D-3	D-4	D-5	D-6	D-7	
ALAMEDA CREEK NEAR NILES	E5 1150.00	37 35 14	121 57 35	Dec. 1951	Monthly	85	94		103			64
ALDER CREEK AT HIGHWAY 1	D4 3035.30	35 51 30	121 24 54	April 1969	Special	71						
ANDERSON CANYON AT HIGHWAY 1	D4 3310.30	36 08 42	121 40 00	April 1969	Special	72						
ARROYO DEL VALLE NEAR LIVERMORE	E5 1400.00	37 37 24	121 45 28	July 1958	Annually	85	94					
ARROYO SECO RIVER NEAR GREENFIELD	O2 1475.00	36 14 12	121 28 48	July 1969	Special	68	89					
ARROYO SECO RIVER NEAR SOLEDAD	O2 1450.00	36 16 42	121 19 30	April 1969	Annually	68						
BIG CREEK AT HIGHWAY 1	D4 3201.50	36 04 18	121 35 48	April 1969	Special	71						
BIG RIVER NEAR MOUTH	F8 2720.00	39 18 53	123 42 15	Jan. 1959	Bimonthly	86	94					
BIG SANDY CREEK AT INDIAN VALLEY ROAD	D3 1035.50	35 48 36	120 42 42	April 1969	Special	68						
BIG SUR RIVER AT BIG SUR	D4 2100.00	36 14 48	121 46 24	April 1969	Special	70						
BIG SUR RIVER AT HIGHWAY 1	D4 2090.20	36 15 12	121 47 06	Feb. 1969	Special	70						
BLIXBY CREEK AT OLD COAST ROAD	D4 3628.50	36 22 12	121 53 36	April 1969	Special	73						
BODFISH CREEK AT HIGHWAY 152	D1 1330.00	37 00 48	121 37 54	April 1969	Special	66						
BUCK CREEK AT HIGHWAY 1	D4 3300.30	36 08 12	121 38 42	April 1969	Special	72						
CACHAGUA CREEK AT PRINCE'S CAMP NEAR LOS PADRES	D4 1400.50	36 24 06	121 39 30	Feb. 1969	Special	70						
CARMEL RIVER AT BERONDA ROAD	D4 1095.10	36 29 18	121 44 18	Jan. 1969	Special	69						
CARMEL RIVER AT HIGHWAY 1	D4 1010.50	36 32 12	121 54 42	April 1969	Special	69						
CARMEL RIVER AT ROBLES DEL RIO	D4 1200.00	36 28 28	121 43 40	Jan. 1959	Semiannually	69	90					
CARMEL RIVER NEAR CAMP STEPHANIE	D4 1205.10	36 28 18	121 43 00	Jan. 1969	Special	70						
CARNADERO CREEK AT BLOOMFIELD AVENUE	D1 1320.00	36 57 54	121 32 00	April 1969	Special	66						
CARQUINEZ STRAIT AT CROCKETT	E0 B 803.5 213.3	38 03 28	122 13 18	1946	Four-day				95			
CARQUINEZ STRAIT AT MARTINEZ	E0 B 801.9 207.8	38 01 55	122 07 46	1926	Four-day				95			
CASTRO CANYON AT HIGHWAY 1	D4 3350.50	36 12 30	121 45 00	April 1969	Special	72						
CHADBOURNE SLOUGH AT CHADBOURNE ROAD	E0 S 811.0 204.8	38 11 00	122 04 50	Jan. 1967	Monthly	80	93		102			
CHALONE CREEK AT METZ-KING CITY ROAD	D2 1530.50	36 21 18	121 12 30	April 1969	Special	68						
CHUPINES CREEK AT CARMEL VALLEY ROAD	D4 1217.10	36 27 12	121 41 36	Jan. 1969	Special	70						
CORDELIA SLOUGH AT CYGNUS	E0 S 809.2 205.3	38 09 10	122 05 20	Jan. 1967	Monthly	79	93		102			
CORDELIA SLOUGH AT UPPER END NEAR CORDELIA	E0 S 811.5 207.2	38 11 30	122 07 10	Sept. 1967	Random	83	93		103			
CORINDA LOS TRANCOS CREEK NEAR HALF MOON BAY	E8 4302.01	37 28 50	122 24 23	March 1969	Special	85	94					
COYOTE CREEK NEAR MADRONE	E6 4250.00	37 10 06	121 38 55	Jan. 1952	Annually	85	94					
DOLAN CANYON AT HIGHWAY 1	D4 3240.50	36 06 24	121 37 24	April 1969	Special	71						
DRAIN INTO CARMEL RIVER NORTH BANK	D4 1012.50	36 32 12	121 54 36	April 1969	Special	69						
ESTRELLA RIVER AT RIVER ROAD	D3 1185.50	35 43 36	120 41 06	April 1969	Special	68						
PELIZ CANYON AT SAN LUCAS ROAD	D2 1725.00	36 06 36	121 03 24	April 1969	Special	68						
GARRAPATA CREEK AT HIGHWAY 1	D4 3645.50	36 25 00	121 54 42	April 1969	Special	73						
GRANITE CANYON AT HIGHWAY 1	D4 3700.50	36 26 12	121 55 00	April 1969	Special	73						
GREEN VALLEY CREEK AT CORDELIA	E0 S 812.7 207.8	38 12 42	122 07 48	Dec. 1968	Random	83						
GRIMES CANYON AT HIGHWAY 1	D4 3345.30	36 12 30	121 44 00	April 1969	Special	72						
GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH	E0 B 807.0 202.3	38 07 02	122 02 18	Jan. 1968	Monthly	79	92		102			
HAMES CREEK AT HIGHWAY 101	D2 1881.20	35 52 18	120 50 06	April 1969	Special	68						
HATTON CREEK AT CARMEL VALLEY ROAD	D4 1022.50	36 32 36	121 54 18	April 1969	Special	69						
HILL SLOUGH AT GRIZZLY ISLAND ROAD	E0 S 813.6 201.2	38 13 34	122 01 14	Feb. 1967	Monthly	83	93		103			
HITCHCOCK CANYON IN ROBLES DEL RIO	D4 1203.50	36 28 12	121 43 24	Feb. 1969	Special	70						
HONKER BAY NEAR WHEELER POINT	E0 B 804.4 156.2	38 04 38	121 56 12	Jan. 1968	Monthly	78	92		101			
HOT SPRINGS CANYON AT HIGHWAY 1	D4 3280.50	36 07 30	121 38 12	April 1969	Special	72						
HUERHUERO CREEK AT RIVER ROAD	D3 1391.50	35 40 30	120 41 06	April 1969	Special	68						
KIRK CREEK AT HIGHWAY 1	D4 3092.50	35 59 24	121 29 36	April 1969	Special	71						
LA BREA CREEK AT HIGHWAY 101	D1 1395.50	36 55 42	121 32 48	April 1969	Special	67						
LAFLEER CANYON AT HIGHWAY 1	D4 3340.30	36 12 12	121 43 30	April 1969	Special	72						
LAS CAZAS CREEK AT CAZAS ROAD	D4 1088.50	36 29 00	121 45 00	Jan. 1969	Special	69						
LIME CREEK AT HIGHWAY 1	D4 3260.50	36 07 18	121 37 18	April 1969	Special	72						
LIMEKILN CREEK AT HIGHWAY 1	D4 3105.50	36 00 30	121 31 06	April 1969	Special	71						
LITTLE SUR RIVER AT HIGHWAY 1	D4 3610.20	36 19 54	121 53 06	Feb. 1969	Special	72						
LLAGAS CREEK AT HIGHWAY 152	D1 1490.00	37 00 18	121 32 06	April 1969	Special	67						
LOS GATOS CREEK AT LOS GATOS	E6 5250.00	37 12 30	121 59 15	Dec. 1951	Semiannually	85	94					
LOS PADRES RESERVOIR	D4 1240.10	36 23 12	121 40 06	Jan. 1969	Special	70						
MALPASO CREEK AT HIGHWAY 1	D4 3746.50	36 28 18	121 56 12	April 1969	Special	73						
MCWAY CANYON AT HIGHWAY 1	D4 3320.30	36 09 30	121 40 12	April 1969	Special	72						
MILL CREEK AT HIGHWAY 1	D4 3081.50	35 58 54	121 29 24	April 1969	Special	71						
MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD	E0 S 811.2 158.5	38 11 14	121 58 32	Feb. 1967	Monthly	82	93		102			
MONTEZUMA SLOUGH NEAR BELDON'S LANDING	E0 S 811.2 158.2	38 11 13	121 58 10	July 1968	Weekly/Biweekly	81						
MUD CREEK AT HIGHWAY 1	D4 3040.30	35 51 48	121 25 48	April 1969	Special	71						
NACIMIENTO RIVER NEAR SAN MIGUEL	D3 3520.00	35 47 00	120 47 24	July 1958	Semiannually	69						
NAPA RIVER AT DUTTON LANDING	E3 1100.50	38 12 28	122 18 20	Sept. 1965	Bimonthly	84	94		103 105 106			
NAPA RIVER NEAR ST. HELENA	E3 1500.00	38 29 40	122 25 50	Dec. 1951	Semiannually	84	94					
NAVARRO RIVER NEAR NAVARRO	F8 2100.00	39 10 15	123 39 55	Jan. 1959	Bimonthly	85	94					
NOYO RIVER NEAR FORT BRAGG	*F8 3200.00	39 26 05	123 44 59	Jan. 1951	Bimonthly	86	94					
PACIFIC OCEAN AT POTATO PATCH SHOAL NR POINT BONITA	E1 0 749.4 233.2	37 49 22	122 33 12	Sept. 1969	Special	94			103			

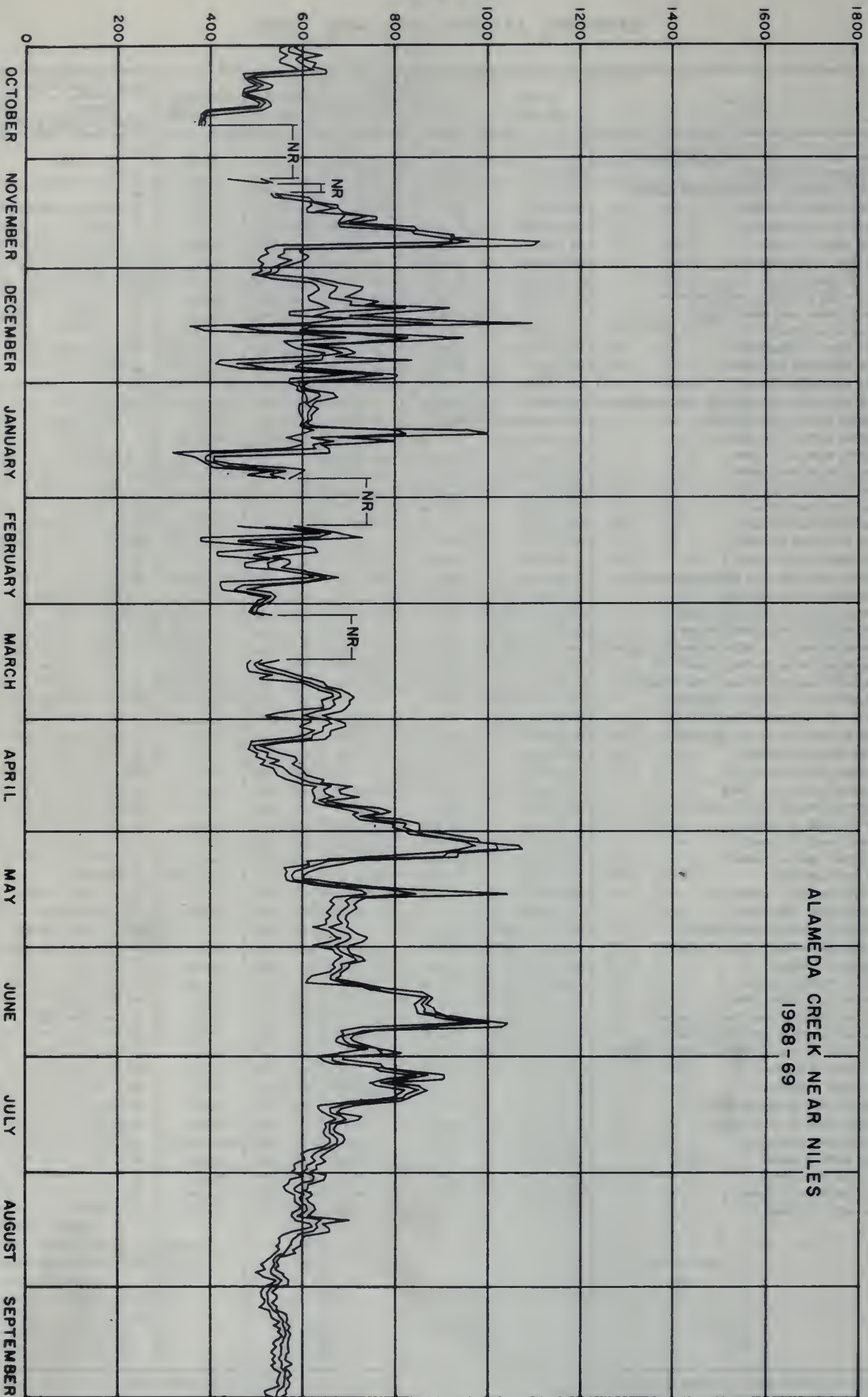
* Formerly reported as F8 3080.50

TABLE D-1
 SAMPLING STATION DATA AND INDEX

Station	Station Number	Location		Beginning Of Record	Frequency Of Sampling	Data on pages indicated										
		Latitude	Longitude			Tables						Fig.				
		" "	" "			D-2	D-3	D-4	D-5	D-6	D-7	D-2				
PACIFIC OCEAN OFF OCEAN AVENUE AT SAN FRANCISCO	EB 0 744.4 231.2	37 44 24	122 31 12	Jan. 1969	Special	94	103									
PAJARO RIVER AT CHITTENDEN	D1 1250.00	36 54 01	121 35 48	Dec. 1951	Bimonthly	66	89									
PANCHO RICO CREEK AT SOUTHERN PACIFIC RAILWAY	D2 1772.20	36 01 00	120 53 48	April 1969	Special	68										
PARTINGTON CREEK AT HIGHWAY 1	D4 3330.30	36 10 30	121 41 12	April 1969	Special	72										
PLASKETT CREEK AT HIGHWAY 1	D4 3063.50	35 55 18	121 28 06	April 1969	Special	71										
FREWITT CREEK AT HIGHWAY 1	D4 3068.50	35 56 12	121 28 12	April 1969	Special	71										
QUAIL CREEK AT OLD STAGE ROAD	D2 1260.00	36 37 00	121 31 18	April 1969	Special	67										
RAT CREEK NEAR LUCIA	D4 4100.00	36 05 36	121 37 12	April 1969	Special	73										
REDWOOD GULCH AT HIGHWAY 1 NEAR JOLON	D4 3010.00	35 50 12	121 23 24	April 1969	Special	70										
ROBINSON CANYON ABOVE CARMEL RIVER	D4 1075.50	36 31 06	121 48 36	Feb. 1969	Special	69										
ROCKY CREEK AT HIGHWAY 1	D4 3635.50	36 22 42	121 54 00	April 1969	Special	73										
RUSSIAN RIVER AT GUERNEVILLE	F9 1080.50	38 30 02	122 59 39	April 1951	Bimonthly	86	94	103								
RUSSIAN RIVER NEAR HEALDSBURG	F9 1500.00	38 44 59	123 05 28	April 1951	Semiannually	86	94									
RUSSIAN RIVER NEAR HOPLAND	F9 1765.00	39 01 35	123 07 45	April 1951	Semiannually	87	94									
RUSSIAN RIVER, EAST FORK, AT POTTER VALLEY POWERHOUSE	F9 4900.00	39 21 42	123 07 38	May 1951	Semiannually	87	94									
SACRAMENTO RIVER AT CHIPPS ISLAND	EO B 802.8 155.0	38 02 47	121 55 02	Jan. 1968	Monthly	76	91	100								
SACRAMENTO RIVER AT COLLINSVILLE	B9 D 804.4 151.3	38 04 25	121 51 18	July 1958	Four-day			95								
SACRAMENTO RIVER AT PITTSBURG	B9 D 802.3 153.0	38 02 18	121 52 58	1945	Four-day			95								
SALINAS RIVER AT PASO ROBLES	D3 1450.00	35 37 42	120 41 06	April 1951	Semiannually	69										
SALINAS RIVER NEAR BRADLEY	D2 1850.00	35 55 40	120 52 00	July 1958	Semiannually	68	90									
SALINAS RIVER NEAR CHUALAR	D2 1310.10	36 33 18	121 32 18	Sept. 1968	Special	67										
SALINAS RIVER NEAR GONZALES	D2 1325.10	36 29 24	121 28 06	May 1969	Bimonthly	67	89									
SALINAS RIVER NEAR SPRECKELS	D2 1220.00	36 37 50	121 40 40	April 1951	Bimonthly	67	89									
SALMON CREEK EAST OF HIGHWAY 1	D4 3003.50	35 48 54	121 21 30	April 1969	Special	70										
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	D1 2450.00	36 36 30	121 12 00	July 1958	Semiannually	67										
SAN FRANCISCO BAY AT PORT POINT	EO B 748.4 228.2	37 48 25	122 28 10	Oct. 1964	Bimonthly	74	90	99 105 106								
SAN FRANCISCO BAY AT GOLDEN GATE BRIDGE	EO B 748.9 228.6	37 48 51	122 28 35	Sept. 1969	Special	90	99									
SAN FRANCISCO BAY AT SAN MATEO BRIDGE ^a	EO B 736.2 211.6	37 36 14	122 11 34	Oct. 1964	Bimonthly	73	90	99 105 106								
SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL) ^a	EO B 735.0 215.0	37 35 01	122 14 59	Sept. 1969	Bimonthly	73	90	99 106								
SAN FRANCISCO BAY AT TREASURE ISLAND ^b	EO B 749.2 222.4	37 49 15	122 22 26	July 1965	Bimonthly	74	90	99 105 106								
SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND ^b	EO B 748.1 222.4	37 48 04	122 22 25	Sept. 1969	Bimonthly	74	90	99 106								
SAN FRANCISCO BAY, SOUTH, AT COYOTE POINT	EO B 735.5 219.4	37 35 27	122 19 26	Dec. 1966	Special	73		105								
SAN PABLO BAY AT POINT SAN PABLO ^c	EO B 757.7 225.6	37 57 40	122 25 35	Jan. 1964	Bimonthly	74	90	100 105 106								
SAN PABLO STRAIT WEST OF THE BROTHERS ^c	EO B 757.7 226.2	37 57 45	122 26 10	Sept. 1969	Bimonthly	75	90	100 106								
SAN JOSE CREEK AT HIGHWAY 1	D4 3800.50	36 31 24	121 55 30	April 1969	Special	73										
SAN LORENZO CREEK AT KING CITY	D2 1630.00	36 12 30	121 07 06	April 1969	Special	68										
SAN LORENZO RIVER AT BIG TREES ^d	DO 1200.00	37 01 40	122 03 30	Dec. 1951	Bimonthly	66	89	99								
SAN LORENZO RIVER AT PARADISE PARK ^d	DO 1180.01	37 00 37	122 02 34	Sept. 1969	Bimonthly	66	89									
SAN MARCOS CREEK AT HIGHWAY 101	D3 1360.50	35 43 12	120 41 42	April 1969	Special	68										
SOBERANES CREEK AT HIGHWAY 1	D4 3743.50	36 27 24	121 55 24	April 1969	Special	73										
SODA SPRINGS CREEK AT HIGHWAY 1	D4 3005.50	35 49 18	121 22 24	April 1969	Special	70										
SOQUEL CREEK AT SOQUEL	DO 3100.00	36 59 29	121 57 17	Dec. 1951	Semiannually	66	89									
SPRIG LAKE OUTFLOW AT HIGHWAY 152	D1 1333.50	37 00 12	121 40 43	April 1969	Special	66										
SUISUN BAY ABOVE AVON PIER	EO B 803.2 204.8	38 03 13	122 04 48	Sept. 1968	Monthly	77	92	101								
SUISUN BAY AT BENICIA (END OF PIER) ^e	EO B 802.4 208.2	38 02 24	122 08 14	Jan. 1966	Random	75	91	100 105 106								
SUISUN BAY AT BENICIA (MIDDLE OF PIER) ^e	EO B 802.5 208.1	38 02 29	122 08 05	March 1969	Random	76	91	100 105 106								
SUISUN BAY AT NICHOLS	EO B 803.0 159.0	38 03 01	121 58 58	Jan. 1964	Four-day			95								
SUISUN BAY AT PORT CHICAGO	EO B 803.4 202.3	38 03 24	122 02 20	1946	Four-day			95								
SUISUN BAY NEAR PRESTON POINT	EO B 804.0 203.0	38 03 58	122 03 00	Sept. 1968	Monthly	78	92	101								
SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ	EO B 802.3 207.1	38 02 20	122 07 06	Feb. 1968	Random	75	90	100 105								
SUISUN BAY OFF MIDDLE POINT NEAR NICHOLS	EO B 803.6 159.3	38 03 01	121 58 58	Jan. 1968	Monthly	77	92	101								
SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND	EO S 810.8 202.8	38 10 50	122 02 45	Jan. 1967	Monthly	80	93	102								
SWISS CANYON AT HIGHWAY 1	D4 3580.50	36 17 42	121 51 54	April 1969	Special	72										
TORRE CANYON AT HIGHWAY 1	D4 3335.50	36 11 48	121 42 36	April 1969	Special	72										
TULARCITOS CREEK AT DOUGLAS RANCH	D4 1215.10	36 30 00	121 42 00	Jan. 1969	Special	70										
TULARCITOS CREEK AT GIRARD RANCH	D4 1225.10	36 26 36	121 39 54	Jan. 1969	Special	70										
UVAS CREEK NEAR MORGAN HILL	D1 1371.50	37 03 36	121 40 18	July 1952	Semiannually	67										
VICENTE CREEK AT HIGHWAY 1	D4 3180.50	36 02 36	121 35 00	April 1969	Special	71										
VILLA CREEK AT HIGHWAY 1	D4 3020.30	35 50 54	121 24 30	April 1969	Special	71										
WILD CATTLE CREEK AT HIGHWAY 1	D4 3078.50	35 58 12	121 28 54	April 1969	Special	71										
WILLOW CREEK AT HIGHWAY 1	D4 3050.20	35 53 42	121 27 30	April 1969	Special	71										

a Alternate stations; can be sampled at either site.
 b Alternate stations; can be sampled at either site.
 c Alternate stations; can be sampled at either site.
 d San Lorenzo River at Paradise Park replaced the "at Big Trees" station in September 1969.
 e "Middle of Pier" station replaced "End of Pier" in March 1969.

FIGURE D-2



ALAMEDA CREEK NEAR NILES
1968-69

MAXIMUM, MINIMUM, AND AVERAGE DAILY SPECIFIC CONDUCTANCE
OCTOBER 1968 THROUGH SEPTEMBER 1969

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

Abbreviations

- LAB - The laboratory which analyzed the sample:
 5006 McClellan Air Force Base Laboratory (used by USBR).
 5050 Department of Water Resources Laboratory at Bryte.
- SAMPLER - 5001 U. S. Bureau of Reclamation.
 5050 Department of Water Resources
- G.H. - Instantaneous gage height in feet above an established datum.
- Q or DEPTH - Instantaneous discharge measured in cubic feet per second (cfs) or depth at which sample was collected.
- DO - Dissolved oxygen content in milligrams per liter.
- SAT - Percent saturation.
- TEMP - Water temperature in degrees Fahrenheit and Celsius.
- PH - Measure of acidity or alkalinity of water.
- EC - Specific electrical conductance in micromhos at 25° Celsius.
- TDS - Gravimetric determination of total dissolved solids at 180° Celsius.
- SUM - Summation of analyzed constituents in prescribed manner.
- TH - Total hardness represents the sum of concentrations of calcium and magnesium ions expressed as milligrams per liter of calcium carbonate.
- NCH - Noncarbonate hardness represents any excess of total hardness over the total alkalinity.

PERCENT REACTANCE VALUE is determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum.

Chemical Symbols

- | | | | |
|------------------|---------------|------------------|-------------|
| B | - Boron | K | - Potassium |
| CA | - Calcium | MG | - Magnesium |
| CL | - Chloride | NA | - Sodium |
| CO ₃ | - Carbonate | NO ₃ | - Nitrate |
| F | - Fluoride | SiO ₂ | - Silica |
| HCO ₃ | - Bicarbonate | SO ₄ | - Sulfate |

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. D	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER					
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	TDS SUM	TH NCH	
		00 1180.01		SAN LORENZO RIVER AT PARADISE PARK																	
09/26/69	5050		10.4	59	F	8.0	340	37	8.4	20	--	0.0	130	--	23	--	--	--	--	--	127
0945	5050		103	15	C	7.9	380	1.85	.69	.87			2.13		.65						21
								54	20	25			62		19						
		D0 1200.00		SAN LORENZO RIVER AT BIG TREES																	
11/07/68	5050	1.03	10.1	52	F	8.2	396	--	--	25	--	0.0	135	--	26	--	--	0.0	--	--	133
0800	5050		92	11	C	7.4	395			1.09			2.21		.73						23
										27			55		18						
01/08/69	5050	1.46	12.5	45	F	7.8	387	40	9.0	22	--	0.0	126	--	22	--	--	0.1	--	--	137
0830	5050		103	7	C	7.6		2.00	.74	.96			2.07		.62						34
								51	19	24			53		16						
03/12/69	5050	3.29	11.9	48	F	7.9	267	30	8.7	11	--	0.0	90	--	11	--	--	0.0	--	--	111
0700	5050		103	9	C	7.3	320	1.50	.72	.48			1.48		.31						37
								56	26	17			55		11						
05/01/69	5050	2.13	11.0	50	F	8.3	325	38	8.0	17	1.4	0.0	116	46	14	0.3	--	0.5	--	206	128
0630	5050		97	10	C	7.3	340	1.90	.66	.74	.04		1.90	.96	.39					182	33
								57	20	22	1		58	30	12						
07/02/69	5050		8.6	74	F	8.3	333	38	8.5	19	--	0.0	129	--	18	--	--	--	--	--	130
1500	5000		102	23	C	7.7	310	1.90	.70	.83			2.12		.51						24
								57	21	24			63		15						
09/26/69	5050	.94	9.4	63	F	8.0	342	38	8.3	21	--	0.0	130	--	22	--	--	--	--	--	129
1300	5050		98	17	C	7.5	380	1.90	.68	.91			2.13		.62						23
								55	19	26			62		18						
		D0 3100.00		SOQUEL CREEK AT SOQUEL																	
04/29/69	5050	3.50	11.0	59	F	8.3	598	70	15	31	3.5	0.0	195	108	26	0.0	--	0.2	--	378	237
1015	5050		109	15	C	8.1	560	3.49	1.23	1.35	.09		3.20	2.25	.73					349	77
								57	20	22	1		52	36	12						
09/26/69	5050	3.14	11.0	62.2F	8.3	739	74	24	47	--	0.0	241	--	68	--	--	--	--	--	--	287
1130	5050		114	16.7C	8.0	800	3.69	2.05	2.04				3.95		1.92						90
								49	27	27			53		25						
		D1 1250.00		PAJARO RIVER AT CHITTENDEN																	
11/15/68	5050		11.2	--	8.6	2310	--	--	287	--		27	455	--	241	--	--	1.0	--	--	669
1345	5050	15			8.1	2000			12.48			.90	7.46		6.80						251
									54			3	32		29						
01/15/69	5050	2.75	9.9	49	F	8.5	1240	--	--	127	--	9.0	269	--	100	--	--	0.6	--	--	405
0940	5050		87	9	C	7.8				5.52		.30	4.41		2.82						170
										44		2	35		22						
03/05/69	5050	9.61	10.8	49	F	8.2	474	--	--	29	--	0.0	179	--	19	--	--	0.2	--	--	183
0850	5050		94	9	C	7.8				1.26			2.94		.54						36
										26			62		11						
05/14/69	5050	3.46	9.6	71	F	8.2	1030	41	60	79	1.6	0.0	390	169	77	27	--	0.5	--	723	451
1525	5050		110	22	C	8.1		4.04	4.93	3.44	.04		6.40	3.52	2.17	.43				686	131
								32	40	28			51	28	17	3					
07/03/69	5050		7.8	62	F	8.3	1370	--	--	120	--	0.0	495	--	114	--	--	0.8	--	--	493
0750	5050		10.0	81	C	8.2				5.22			8.12		3.21						87
										38			59		23						
09/04/69	5050		9.1	60	F	8.1	1790	9.2	134	207	5.2	0.0	523	285	200	4.9	--	0.9	--	1190	574
0810	5050		92	16	C	8.3	1350	.46	11.01	9.00	.13		8.58	5.93	5.64	.08				1102	145
								2	53	44	1		42	29	28						
		D1 1320.00		CARNADERO CREEK AT BLOOMFIELD AVENUE																	
04/07/69	5050		--	--	8.3	305	30	16	11	1.0	0.0	144	24	9.6	2.6	--	0.0	--	159	140	
1120	5050					290	1.50	1.32	.48	.03			2.36	.50	.27	.04				165	22
							45	40	14	1			74	16	9	1					
		D1 1330.00		BODFISH CREEK AT HIGHWAY 152																	
04/07/69	5050		--	--	8.0	436	44	17	20	1.2	0.0	179	46	17	0.7	--	0.1	--	241	179	
1155	5050					410	2.20	1.40	.87	.03			2.94	.96	.48	.01				234	32
							49	31	19	1			67	22	11						
		D1 1333.50		SPRIG LAKE OUTFLOW AT HIGHWAY 152																	
04/07/69	5050		--	--	8.0	410	36	20	16	1.6	0.0	169	46	14	0.7	--	0.0	--	225	174	
1210	5050					390	1.80	1.64	.70	.04			2.77	.96	.39	.01				217	36
							43	39	17	1			67	23	9						

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.H. Q	DU SAT	TEMP	PH LAB FLD	TC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER TDS TH					
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	SUM	TH NCH	
D1 1371.50 UVAS CREEK NEAR MORGAN MILL																					
05/14/69	5050		13.4	64	F	7.9	291	31	14	8.6	1.5	0.0	148	21	5.4	0.8	--	0.1	--	168	135
1435	5050		142	18	C	8.2		1.95	1.15	.37	.04		2.43	.44	.15	.01				155	14
								50	37	12	1		80	15	5						
09/03/69	5050		8.9	78	F	7.9	336	--	--	10	--	0.0	170	--	7.0	--	--	0.0	--	--	157
1425	5050		110	26	C	7.7	300			.44			2.79		.20						18
										13			83		5						
D1 1395.50 LA BREA CREEK AT HIGHWAY 101																					
04/07/69	5050				--	8.0	576	44	29	35	1.6	0.0	254	38	36	4.3	--	0.5	--	313	231
1300	5050						550	2.20	2.38	1.52	.04		4.17	.79	1.02	.07				313	23
								36	39	25	1		69	13	17	1					
D1 1490.00 LLAGAS CREEK AT HIGHWAY 152																					
04/07/69	5050				--	8.0	377	32	22	9.4	2.1	0.0	186	16	8.1	8.6	--	0.1	--	184	169
1100	5050						350	1.60	1.81	.41	.05		3.05	.33	.23	.14				189	17
								41	47	11	.1		81	9	6	4					
D1 2450.00 SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION																					
05/14/69	5050		10.0	70	F	8.3	1120	21	92	104	1.9	0.0	446	203	51	0.1	--	1.1	--	718	429
1230	5050		113	21	C	8.4		1.05	7.56	4.52	.05		7.31	4.22	1.44					693	64
								8	57	34			56	33	11						
09/04/69	5050		9.8	76	F	8.5	1060	--	--	83	--	14	476	--	39	--	--	1.0	--	--	450
1130	5050		119	24	C	8.4	870			3.61		.47	7.81		1.10						36
										34		4	73		10						
D2 1220.00 SALINAS RIVER NEAR SPRECKELS																					
11/15/68	5050		6.3		--	8.5	1420	--	--	112	--	6.0	565	--	137	--	--	0.2	--	--	472
1015	5050	10.0				7.6	1380			4.87		.20	9.27		3.86						0
										34		1	65		27						
01/15/69	5050		8.22	10.0	48	F	7.8	255	--	--	14	--	91	--	11	--	--	0.1	--	--	102
1045	5050			86	9	C	7.6			.61			1.49		.31						28
										23			58		12						
03/05/69	5050		9.16	10.9	54	F	8.2	474	--	--	28	--	137	--	19	--	--	0.1	--	--	172
1010	5050			102	12	C	8.0			1.22			2.25		.54						60
										25			47		11						
05/14/69	5050		4.71	9.5	61	F	7.9	531	51	20	32	2.4	0.0	164	95	25	2.8	--	0.1	--	368
0900	5050			97	16	C	6.8		2.54	1.64	1.39	.06		2.69	1.98	.71	.05				309
									45	29	25	1		50	36	13	1				76
09/03/69	5050		4.05	10.0	88	F	7.8	437	--	--	23	--	0.0	159	--	18	--	--	0.0	--	--
1020	5050			111	20	C	8.2	360			1.00			2.61		.51					180
										22				59		11					50
D2 1260.50 QUAIL CREEK AT OLD STAGE ROAD																					
04/08/69	5050				--	8.2	498	44	12	37	1.7	0.0	158	32	51	2.8	--	0.1	--	276	160
0845	5050						480	2.20	.99	1.61	.04		2.59	.67	1.44	.05				258	31
								45	20	33	1		55	14	30	1					
D2 1310.10 SALINAS RIVER AT CHUALAR																					
11/15/68	5050		12.4		--	8.3	600	--	--	37	--	0.0	189	--	28	--	--	0.2	--	--	233
1100	5050	50				8.3	600			1.61			3.10		.79						78
										26			51		13						
01/15/69	5050		12.4	48	F	7.8	281	--	--	15	--	0.0	91	--	8.0	--	--	0.0	--	--	113
1100	5050			107	9	C	8.0			.65			1.49		.23						39
										23			53		8						
03/05/69	5050		12.3	52	F	8.3	469	--	--	27	--	0.0	134	--	19	--	--	0.2	--	--	175
1100	5050			112	11	C	8.0			1.17			2.20		.54						65
										24			46		11						
D2 1325.10 SALINAS RIVER NEAR GONZALES																					
05/14/69	5050		10.3	62	F	8.1	508	50	17	30	3.5	0.0	161	91	23	2.3	--	0.2	--	334	196
0945	5050		106	17	C	8.0		2.50	1.40	1.31	.09		2.64	1.89	.65	.04				296	64
								47	26	25	2		51	36	12	1					
07/02/69	5050		9.8	72	F	8.3	437	--	--	24	--	0.0	145	--	19	--	--	0.1	--	--	175
1240	5050			114	22	C	8.0			1.04			2.38		.54						56
										23			54		12						
09/03/69	5050		9.3	63	F	7.8	399	44	14	20	1.4	0.0	160	65	14	1.2	--	0.0	--	252	169
0810	5050			97	17	C	8.0	335	2.20	1.15	.87	.04		2.62	1.35	.39	.02				238
									52	27	20	1		60	31	9					38

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. Q	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER						
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	TDS SUM	TM NCH		
D2 1450.00 ARROYO SECO RIVER NEAR SOLEDAD																						
04/08/69	5050			--	7.4	288	35	7.7	11	2.5	0.0	111	43	5.5	0.0	--	0.0	--	171	119		
1620	5050					280	1.75	.63	.48	.06		1.82	.89	.16					159	28		
							60	22	16	2		63	31	6								
D2 1475.00 ARROYO SECO RIVER NEAR GREENFIELD																						
07/02/69	5050		9.2	71	F	8.2	341	--	--	13	--	0.0	149	--	6.5	--	--	.00	--	--	153	
1100	5050	20	105	22	C	8.1				.57			2.44		.18						31	
										16			71		5							
09/02/69	5050		8.6	78	F	8.1	395	47	14	19	2.4	0.0	172	64	7.0	0.3	--	0.0	--	241	175	
1410	5050		106	26	C	8.0	340	2.35	1.15	.83	.06		2.82	1.33	.20						238	34
								54	26	19	1		65	31	5							
D2 1530.50 CHALONE CREEK AT METZ KING CITY ROAD																						
04/08/69	5050			--	7.4	763	54	12	85	3.1	0.0	172	110	85	2.6	--	0.3	--	469	186		
0945	5050					740	2.69	.99	3.70	.08		2.82	2.29	2.40	.04						436	45
							36	13	50	1		37	30	32	1							
D2 1630.00 SAN LORENZO CREEK AT KING CITY																						
04/08/69	5050			--	7.6	2650	118	126	329	5.5	0.0	363	1020	122	7.5	--	1.4	--	1020	812		
1015	5050					2600	5.89	10.36	14.31	.14		5.95	21.22	3.44	.12						1907	515
							19	34	47			19	69	11								
D2 1725.00 FELIZ CANYON AT SAN LUCAS ROAD																						
04/08/69	5050			--	9.7	1540	116	68	111	2.7	4.7	20	409	220	7.2	--	0.2	--	1010	570		
1515	5050	1.0				1500	5.79	5.59	4.83	.07	.16	.33	8.51	6.20	.12						949	546
							36	34	30			1	2	56	40	1						
D2 1772.20 PANCHO RICO CREEK AT SOUTHERN PACIFIC Rwy																						
04/08/69	5050			--	7.6	3240	265	128	365	9.0	0.0	255	1530	103	15	--	1.3	--	1390	1190		
1045	5050					3000	13.22	10.52	15.88	.23		4.18	31.82	2.90	.24						2541	982
							33	26	40	1		11	81	7	1							
D2 1850.00 SALINAS RIVER NEAR BRADLEY																						
05/13/69	5050	5.96	10.4	63	F	8.3	343	34	11	15	1.8	0.0	122	43	11	0.4	--	0.2	--	206	130	
1155	5050		109	17	C	7.8		1.70	.90	.65	.05		2.00	.89	.31	.01					176	30
								52	27	20	2		62	28	10							
09/02/69	5050	5.86	9.1	71	F	7.9	342	35	15	14	1.3	0.0	143	47	7.5	0.5	--	0.0	--	202	149	
1145	5050		104	22	C	7.9	280	1.75	1.23	.61	.03		2.35	.98	.21	.01					190	32
								.48	.34	.17	.1		.66	.28	.6							
D2 1881.20 HAMES CREEK AT HIGHWAY 101																						
04/08/69	5050			--	7.5	586	61	18	30	5.0	0.0	158	103	27	16	--	0.2	--	382	225		
1430	5050					590	3.04	1.48	1.31	.13		2.59	2.14	.76	.26						338	96
							51	25	22	2		45	37	13	5							
D3 1035.50 BIG SANDY CREEK AT INDIAN VALLEY ROAD																						
04/08/69	5050			--	7.5	1860	169	80	151	7.0	0.0	317	701	57	6.5	--	0.6	--	1500	752		
1310	5050					1850	8.43	6.58	6.57	.18		5.20	14.58	1.61	.10						1327	492
							39	30	30	1		24	68	7								
D3 1185.50 ESTRELLA RIVER AT RIVER ROAD																						
04/08/69	5050			--	7.8	1620	101	60	171	4.8	0.0	298	398	140	5.2	--	0.7	--	1090	498		
1330	5050					1700	5.04	4.93	7.44	.12		4.89	8.28	3.95	.08						1027	254
							29	28	42	1		28	48	23								
D3 1360.50 SAN MARCOS CREEK AT HIGHWAY 101																						
04/08/69	5050			--	7.6	1060	103	44	62	3.9	0.0	276	238	67	4.2	--	0.2	--	665	439		
1410	5050					1100	5.14	3.62	2.70	.10		4.53	4.95	1.89	.07						658	213
							44	31	23	1		40	43	17	1							
D3 1391.50 HUEHUERO CREEK AT RIVER ROAD																						
04/08/69	5050			--	7.6	603	62	11	46	4.6	0.0	214	46	50	1.8	--	0.1	--	335	199		
1345	5050					400	3.09	.90	2.00	.12		3.51	.96	1.41	.03						326	24
							51	15	33	2		59	16	24	1							

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. O	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER						
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2	TDS SUM	TH NCH		
D3 1450.00 SALINAS RIVER AT PASO ROBLES																						
05/13/69	5050			11.4	62 F	8.1	837	93	32	46	2.7	0.0	310	133	46	3.9	--	0.2	--	570	366	
0950	5050			118	17 C	8.0		4.04	2.63	2.00	.07		5.08	2.77	1.30	.06				509	112	
								50	28	21	1		55	30	14	1						
09/02/69	5050			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1015	5050	49b																				
D3 3520.00 NACIMIENTO RIVER NEAR SAN MIGUEL																						
05/13/69	5050			11.2	56 F	8.3	227	26	7.5	6.6	2.0	0.0	91	26	4.6	0.1	--	0.1	--	152	96	
1045	5050			107	13 C	7.8		1.30	.62	.29	.05		1.49	.54	.13					117	22	
								58	27	13	2		69	25	6							
09/02/69	5050			8.8	66 F	7.6	280	--	--	9.0	--	0.0	122	--	7.2	--	--	0.0	--	--	132	
1055	5050			95	19 C	7.4	245			.39			2.00		.20						32	
										13			71		7							
D4 1010.50 CARMEL RIVER AT HIGHWAY 1																						
04/23/69	5050			--	7.8		355	35	11	18	2.1	0.0	114	47	19	0.3	--	0.0	--	210	131	
	5050							1.75	.90	.78	.05		1.87	.98	.54					188	38	
								50	26	22	1		55	29	16							
07/02/69	5050			--	8.0		576	57	20	32	3.9	0.0	148	116	42	0.3	--	0.0	--	356	223	
1500	5050	19.0					550	2.04	1.64	1.39	.10		2.43	2.41	1.18					344	102	
								48	27	23	2		40	40	20							
D4 1012.50 DRAIN INTO CARMEL RIVER NORTH BANK																						
04/23/69	5050			--	7.6		349	35	10	18	2.1	0.0	106	48	21	0.5	--	0.1	--	223	130	
	5050							1.75	.82	.78	.05		1.74	1.00	.59	.01				187	43	
								51	24	23	1		52	30	18							
D4 1022.50 MATTON CREEK AT CARMEL VALLEY ROAD																						
04/23/69	5050			--	8.0		1040	97	25	93	1.3	0.0	284	88	144	2.5	--	0.1	--	661	325	
	5050							4.84	2.06	4.05	.03		4.66	1.83	4.06	.04				590	92	
								44	19	37			44	17	38							
D4 1075.50 ROBINSON CANYON ABOVE CARMEL RIVER																						
02/18/69	5050			53	F	7.8	217	19	5.4	19	1.2	0.0	48	--	23	0.5	--	0.2	--	--	70	
	5050			12	C		210	.95	.45	.83	.03		.79		.65	.01					31	
								43	20	38	1		36		29							
D4 1088.50 LAS GAZAS CREEK AT GAZAS ROAD																						
01/28/69	5050			--	7.9		111	8.7	2.5	8.9	1.8	0.0	38	--	9.7	1.6	--	0.0	--	--	32	
0935	5050							.43	.21	.39	.05		.62		.27	.03					1	
								38	18	35	4		55		24	2						
D4 1095.10 CARMEL RIVER AT BERONDA ROAD																						
01/15/69	5050			49	F	7.5	244	24	8.0	12	2.3	0.0	96	--	10	0.4	--	0.0	--	--	93	
1720	5050			9	C	7.5	250	1.20	.66	.52	.06		1.61		.28	.01					13	
								49	27	21	2		65		11							
04/22/69	5050			--	7.8		300	31	9.4	15	1.7	0.0	110	32	16	0.1	--	0.0	--	181	116	
	5050							1.55	.77	.65	.04		1.80	.67	.45					159	26	
								51	26	22	1		62	23	15							
D4 1200.00 CARMEL RIVER AT ROBLES DEL RIO																						
01/15/69	5050			49	F	7.5	242	24	8.0	12	2.3	0.0	96	--	11	0.3	--	0.0	--	--	93	
1635	5050			9	C	7.6	290	1.20	.66	.52	.06		1.57		.31						15	
								49	27	21	2		64		12							
05/15/69	5050	3.61	11.3	61	F	8.2	331	34	11	18	2.4	0.0	116	41	18	0.3	--	0.1	--	229	129	
0905	5050		115	16	C	7.9		1.70	.90	.78	.06		1.90	.85	.51					182	34	
								49	26	23	2		58	26	16							
09/03/69	5050			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1205	5050	49b																				

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.H. Q	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER				TH NCH	
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02		T05 SUM
D4 1203.50 HITCHCOCK CANYON IN ROBLES DEL RIO																				
02/18/69	5050 5050			54 F	7.8	250	18	10	18	2.5	0.0	74	--	20	2.5	--	0.1	--	--	88
				12 C		250	.90	.86	.78	.06		1.21	.56	.04						
D4 1205.10 CARMEL RIVER NEAR CAMP STEPHANIE																				
01/15/69	5050 5050			49 F	7.3	240	23	8.9	11	2.2	0.0	96	--	10	0.4	--	0.0	--	--	94
				9 C	7.4	240	1.15	.73	.48	.06		1.57	.28	.01						
D4 1215.10 TULARCITOS CREEK AT DOUGLAS RANCH																				
01/16/69	5050 1325			--	7.7	1720	104	58	138	7.1	0.0	464	--	194	0.0	--	0.1	--	--	651
					8.3	1500	8.18	4.83	6.00	.18		7.61	5.47							
02/18/69	5050 5050			54 F	8.2	691	57	17	56	4.5	0.0	182	--	67	4.7	--	0.1	--	--	215
				12 C		600	2.84	1.45	2.44	.12		2.98	1.89	.08						
D4 1217.10 CHUPINES CREEK AT CARMEL VALLEY ROAD																				
01/16/69	5050 1345			--	7.5	2080	199	66	186	7.0	0.0	483	--	257	0.2	--	0.2	--	--	768
					8.0	1800	9.93	5.43	8.09	.18		7.92	7.25							
D4 1225.10 TULARCITOS CREEK AT GIRARD RANCH																				
01/16/69	5050 1325			45 F	8.0	1450	141	47	110	6.0	0.0	405	--	144	0.0	--	0.0	--	--	546
				7 C	6.7	1325	7.04	3.88	4.79	.15		6.64	4.06	.28						
D4 1240.10 LOS PADRES RESERVOIR																				
01/15/69	5050 1420			57 F	7.3	158	16	5.3	5.2	1.4	0.0	58	--	5.6	1.0	--	0.0	--	--	62
				14 C	7.3	175	.80	.44	.23	.04		.95	.16	.02						
D4 1400.50 CACHAGUA CREEK AT PRINCE'S CAMP NEAR LOS PADRES																				
02/18/69	5050 5050			54 F	8.5	383	39	12	19	3.0	3.0	128	--	18	0.9	--	0.0	--	--	148
				12 C		360	1.95	1.01	.83	.08	.10	2.10	.51	.01						
D4 2090.20 BIG SUR RIVER AT HIGHWAY 1																				
02/18/69	5050 5050			54 F	8.3	198	26	5.6	6.1	1.0	0.0	92	--	5.0	0.1	--	0.0	--	--	88
				12 C		200	1.30	.46	.27	.03		1.51	.14							
05/15/69	5050 5050			--	7.7	313	40	10	11	--	0.0	147	--	11	0.6	--	--	--	--	142
							2.00	.84	.48			2.41	.31	.01						
D4 2100.00 BIG SUR RIVER AT BIG SUR																				
04/22/69	5050 1620			56 F	7.6	228	31	7.7	6.8	3.0	0.0	119	15	4.3	0.0	--	0.0	--	133	109
				13 C			1.55	.63	.30	.08		1.95	.31	.12						
D4 3003.50 SALMON CREEK EAST OF HIGHWAY 1																				
04/22/69	5050 0830	15		53 F	8.1	295	29	19	7.0	0.7	0.0	172	14	5.5	0.0	--	0.4	--	148	149
				12 C			1.45	1.56	.30	.02		2.82	.29	.16						
D4 3005.50 SODA SPRINGS CREEK AT HIGHWAY 1																				
04/22/69	5050 0843	1.5		53 F	7.9	539	56	32	12	1.5	0.0	287	44	13	0.0	--	0.0	--	273	274
				12 C			2.79	2.63	.52	.04		4.71	.92	.37						
D4 3010.00 REDWOOD GULCH AT HIGHWAY 1 NEAR JOLON																				
04/22/69	5050 0855	2.5		52.5F	8.2	417	39	27	10	1.1	0.0	230	21	11	0.0	--	0.0	--	209	208
				11.3C			1.95	2.22	.44	.03		3.77	.44	.31						

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. Q	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER									
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2	TDS SUM	TH MCH				
				D4 3020.30	VILLA CREEK AT HIGHWAY 1																			
04/22/69	5050			54 F	8.7	360	36	20	7.7	1.0	0.0	204	13	8.6	0.0	--	0.0	--	177	173				
0900	5050	16		12 C			1.80	1.64	.33	.03		3.35	.27	.24					186	6				
							47	43	9	1		.87	7	6										
				D4 3035.30	ALDER CREEK AT HIGHWAY 1																			
04/22/69	5050			53.5F	8.1	333	29	21	8.0	0.7	0.0	184	13	9.0	0.0	--	0.0	--	164	158				
0915	5050	4.0		11.9C			1.45	1.73	.35	.02		3.02	.27	.25					171	7				
							.41	.49	.10	.1		.85	.8	.7										
				D4 3040.30	MUD CREEK AT HIGHWAY 1																			
04/22/69	5050			54 F	8.2	700	51	47	29	--	0.0	233	--	23	0.5	--	--	--	--	321				
0920	5050	0.2		12 C			2.54	3.87	1.26			3.82		.65	.01					130				
							36	55	18			.54		.9										
				D4 3050.20	WILLOW CREEK AT HIGHWAY 1																			
04/22/69	5050			54 F	8.0	283	30	13	11	0.9	0.0	147	14	11	0.0	--	0.0	--	138	130				
0935	5050	26		12 C			1.50	1.07	.48	.02		2.41	.29	.31					152	10				
							.49	.35	.16	.1		.80	.10	.10										
				D4 3063.50	PLASKETT CREEK AT HIGHWAY 1																			
04/22/69	5050			53 F	7.8	354	36	11	18	1.0	0.0	144	18	27	0.0	--	0.0	--	190	135				
1020	5050	2.0		12 C			1.80	.90	.78	.03		2.36	.37	.76					182	17				
							51	26	22	1		.68	.11	.22										
				D4 3068.50	PREWITT CREEK AT HIGHWAY 1																			
04/22/69	5050			53 F	7.8	257	29	7.7	14	0.7	0.0	116	16	14	0.0	--	0.0	--	136	104				
1030	5050	8.0		12 C			1.45	.63	.61	.02		1.90	.33	.39					138	9				
							.54	.23	.23	.1		.73	.13	.15										
				D4 3078.50	WILD CATTLE CREEK AT HIGHWAY 1																			
04/22/69	5050			53 F	7.8	382	46	9.5	17	0.8	0.0	156	33	19	0.0	--	0.0	--	194	154				
1045	5050	2.0		12 C			2.30	.78	.74	.02		2.56	.69	.54					202	26				
							60	20	19	1		.68	.18	.14										
				D4 3081.50	MILL CREEK AT HIGHWAY 1																			
04/22/69	5050			54 F	8.0	387	53	12	9.6	0.9	0.0	194	25	10	0.3	--	0.0	--	199	182				
1050	5050	11		12 C			2.64	.99	.42	.02		3.18	.52	.28					206	23				
							.85	.24	.10			.80	.13	.7										
				D4 3092.50	KIRK CREEK AT HIGHWAY 1																			
04/22/69	5050			55 F	7.8	379	44	15	10	0.7	0.0	185	20	12	2.0	--	0.0	--	194	173				
1105	5050	4.0		13 C			2.20	1.23	.44	.02		3.03	.42	.34	.03				194	22				
							57	32	11	1		.79	.11	.9	.1									
				D4 3105.50	LIMEKILN CREEK AT HIGHWAY 1																			
04/22/69	5050			55 F	7.9	330	39	14	6.5	0.5	0.0	169	16	7.7	0.2	--	0.0	--	161	155				
1115	5050	2.3		13 C			1.95	1.15	.28	.01		2.77	.33	.22					167	17				
							.58	.34	.8			.83	.10	.7										
				D4 3180.50	VICENTE CREEK AT HIGHWAY 1																			
04/22/69	5050			53 F	8.1	305	39	11	10	0.8	0.0	156	19	1.0	0.0	--	0.0	--	157	143				
1150	5050	7.0		12 C			1.95	.90	.44	.02		2.56	.40	.03					157	15				
							.59	.27	.13	.1		.86	.13	.1										
				D4 3201.50	BIG CREEK AT HIGHWAY 1																			
04/22/69	5050			54 F	7.8	298	43	11	5.6	0.7	0.0	169	15	4.8	0.0	--	0.0	--	158	152				
1210	5050			12 C			2.15	.90	.24	.02		2.77	.31	.14					163	14				
							.65	.27	.7	.1		.86	.10	.4										
				D4 3240.50	DOLAN CANYON AT HIGHWAY 1																			
04/22/69	5050			--	7.5	360	47	10	8.0	0.8	0.0	178	21	10	0.5	--	0.0	--	185	160				
1300	5050						2.35	.82	.35	.02		2.92	.44	.28	.01				185	14				
							.86	.23	.10	.1		.80	.12	.8										

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. G	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER				
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	TDS SUM	TH MCH
04 3260.50 LIME CREEK AT HIGHWAY 1																				
04/22/69	5050			57 F	7.6	397	56	12	8.5	0.5	0.0	202	22	11	0.1	--	0.0	--	185	187
1315	5050	1.5		14 C			2.79	.99	.37	.01		3.31	.46	.31					209	22
							67	24	9			81	11	8						
04 3280.50 HOT SPRINGS CANYON AT HIGHWAY 1																				
04/22/69	5050			55 F	7.8	352	50	11	7.1	0.4	0.0	187	17	7.7	0.1	--	0.0	--	191	171
1320	5050	8.0		13 C			2.50	.90	.31	.01		3.07	.35	.22					185	18
							67	24	8			84	10	6						
04 3300.30 BUCK CREEK AT HIGHWAY 1																				
04/22/69	5050			55 F	7.5	390	46	16	9.2	0.8	0.0	188	27	12	0.0	--	0.0	--	221	180
1345	5050	2.0		13 C			2.30	1.32	.40	.02		3.08	.56	.34					203	26
							57	33	10			77	14	9						
04 3310.30 ANDERSON CANYON AT HIGHWAY 1																				
04/22/69	5050			58 F	7.5	338	46	11	6.8	0.1	0.0	187	13	8.0	0.0	--	0.0	--	184	162
1400	5050	12		14 C			2.30	.90	.30			3.07	.27	.23					177	9
							66	26	9			86	8	6						
04 3320.30 MCWAY CANYON AT HIGHWAY 1																				
04/22/69	5050			55 F	7.6	333	44	11	8.1	0.1	0.0	183	9.7	8.8	0.0	--	0.0	--	167	157
1415	5050	7.5		13 C			2.20	.90	.35			3.00	.20	.25					171	7
							64	26	10			87	6	7						
04 3330.30 PARTINGTON CREEK AT HIGHWAY 1																				
04/22/69	5050			54 F	7.6	303	46	9.2	7.3	0.4	0.0	175	8.7	8.3	0.0	--	0.0	--	173	153
1425	5050	8.0		12 C			2.30	.76	.32	.01		2.87	.18	.23					166	10
							68	22	9			88	5	7						
04 3335.50 TORRE CANYON AT HIGHWAY 1																				
04/22/69	5050			54 F	7.6	356	46	13	8.5	0.4	0.0	192	22	8.1	0.0	--	0.0	--	169	170
1440	5050	5.0		12 C			2.30	1.07	.37	.01		3.15	.46	.23					192	13
							61	29	10			82	12	6						
04 3340.30 LAFLER CANYON AT HIGHWAY 1																				
04/22/69	5050			55 F	8.2	356	19	29	8.9	--	0.0	181	--	9.1	1.8	--	--	--	--	167
1455	5050	1.0		13 C			.95	2.39	.39			2.97		.26	.03					19
							26	67	10			83		7						
04 3345.30 GRIMES CANYON AT HIGHWAY 1																				
04/22/69	5050			55 F	8.0	318	19	23	7.6	--	0.0	154	--	7.6	1.6	--	--	--	--	146
1500	5050	3.0		13 C			.95	1.97	.33			2.53		.21	.03					20
							29	61	10			79		6						
04 3350.50 CASTRO CANYON AT HIGHWAY 1																				
04/22/69	5050			55 F	8.0	373	58	9.0	8.4	--	0.0	187	--	12	0.1	--	--	--	--	182
1340	5050	0.5		13 C			2.89	.74	.37			3.07		.34						29
							77	19	9			82		9						
04 3580.50 SWISS CANYON AT HIGHWAY 1																				
04/22/69	5050			61 F	8.2	471	46	18	27	--	0.0	200	--	30	0.1	--	--	--	--	189
1640	5050	1.0		16 C			2.30	1.48	1.17			3.28		.85						25
							48	31	24			69		18						
04 3610.20 LITTLE SUR RIVER AT HIGHWAY 1																				
02/18/69	5050			54 F	8.1	191	24	5.8	7.3	1.0	0.0	94	--	6.6	0.1	--	0.0	--	--	84
	5050			12 C		155	1.20	.48	.32	.03		1.54		.19						7
							62	25	16	1		80		9						
04/22/69	5050			56 F	7.6	239	30	7.3	9.0	0.7	0.0	120	15	8.4	0.0	--	0.0	--	142	105
	5050	8.0		13 C			1.50	.60	.39	.02		1.97	.31	.24					129	7
							60	24	16	1		78	12	10						

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.H. Q	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER						
							CA	MG	NA	K	CO3	HC03	S04	CL	N03	F	B	SI02	T05 SUM	TH NCH	
U4 3628.50 BIXBY CREEK AT OLD COAST ROAD																					
04/23/69	5050			52.5F	7.9	226	24	7.0	12	0.5	0.0	103	10	14	0.0	--	0.0	--	138	89	
0840	5050	36		11.3C			1.20	.58	.52	.01		1.69	.21	.39					118	5	
04 3635.50 ROCKY CREEK AT HIGHWAY 1																					
04/23/69	5050			53 F	8.0	207	17	7.2	14	0.9	0.0	90	4.9	16	0.0	--	0.0	--	128	72	
0900	5050	26		12 C			.85	.59	.61	.02		1.48	.10	.45					104	0	
04 3645.50 GAHRAPATA CREEK AT HIGHWAY 1																					
04/23/69	5050			53 F	7.7	202	13	8.6	16	1.0	0.0	82	8.1	19	0.0	--	0.0	--	126	68	
0935	5050	18		12 C			.65	.71	.70	.03		1.34	.17	.54					106	1	
04 3700.50 GRANITE CANYON AT HIGHWAY 1																					
04/23/69	5050			54 F	9.8	266	13	9.1	27	0.8	25	30	8.6	35	0.0	--	0.0	--	154	70	
0950	5050	2.0		12 C			.65	.75	1.17	.02	.83	.49	.18	.99					133	4	
04 3743.50 SOBERANES CREEK AT HIGHWAY 1																					
04/23/69	5050			56 F	9.1	295	18	8.0	28	1.4	17	57	8.2	37	0.0	--	0.0	--	164	78	
1005	5050	4.0		13 C			.90	.66	1.22	.04	.57	.93	.17	1.04					146	3	
04 3746.50 MALPASO CREEK AT HIGHWAY 1																					
04/23/69	5050			54 F	9.8	276	16	6.3	30	1.1	28	14	15	37	2.5	--	0.0	--	164	66	
1015	5050	2.5		12 C			.80	.52	1.31	.03	.93	.23	.31	1.04	.04				143	8	
04 3800.50 SAN JOSE CREEK AT HIGHWAY 1																					
04/23/69	5050			55 F	9.2	240	16	5.6	22	1.0	13	38	18	30	0.0	--	0.0	--	149	63	
1055	5050	18		13 C			.80	.46	.96	.03	.43	.62	.37	.85					124	11	
04 4100.00 HAT CREEK NEAR LUCIA																					
04/22/69	5050	.78		55 F	8.3	356	40	10	16	0.3	0.0	156	13	23	1.7	--	0.0	--	182	143	
1250	5050	1.0		13 C			2.00	.82	.70	.01		2.56	.27	.65	.03				180	15	
E0 8 735.0 215.0 SAN FRANCISCO BAY AT SAN MATEO BR (SHIP CH.)																					
09/16/69	5050			8.1 68 F	--	40100	--	--	--	--	--	--	--	17200	--	--	--	--	29100	--	
0950	5050			90 20 C	8.1	44100								485.04							
E0 8 735.5 219.4 SAN FRANCISCO BAY, SOUTH, AT COYOTE POINT																					
02/04/69				31.9F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1750	5050			9.8C	7.6																
E0 8 736.2 211.6 SAN FRANCISCO BAY AT SAN MATEO BRIDGE																					
10/15/68	5050			7.8 62 F	--	49200	--	--	--	--	--	--	--	18000	--	--	--	--	34700	--	
0855	5050			81 17 C	7.3									507.60							
12/09/68 5050 6.5 55 F -- 47400 -- -- -- -- -- -- -- -- 17800 -- -- -- 33900 --																					
0935	5050			01 13 C	8.1									501.96							
02/05/69 5050 10.2 49 F -- 22600 -- -- -- -- -- -- -- -- 7650 -- -- -- 14200 --																					
0835	5050			09 9 C	7.9	25000								215.73							
04/07/69 5050 11.0 59 F -- 28800 -- -- -- -- -- -- -- -- 10300 -- -- -- 19200 --																					
1020	5050			109 15 C	8.6	31000								290.46							

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	DU SAT	TEMP SAT	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER					
							CA	MG	NA	K	CO ₃	HC0 ₃	SO ₄	CL	NO ₃	F	B	SI0 ₂	TDS SUM	TN MCM
E0 B 736.2 211.6 SAN FRANCISCO BAY AT SAN MATEO BRIDGE CONTINUED																				
06/04/69	5050		7.8	69	F	--	32400	--	--	--	--	--	--	11600	--	--	--	--	22500	--
1045	5050		87	21	C	8.6	32000							327.12						
														100						
08/13/69	5050		8.2	70	F	--	38100	--	--	--	--	--	--	15100	--	--	--	--	28100	--
0930	5050		93	21	C	8.2	37000							425.82						
														111						
E0 B 748.1 222.4 SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND																				
09/16/69	5050		--	--		--	40800	--	--	--	--	--	--	17500	--	--	--	--	29300	--
1100	5000													493.50						
														120						
E0 B 748.4 228.2 SAN FRANCISCO BAY AT FORT POINT																				
10/14/68	5050		8.2	60	F	--	49200	--	--	--	--	--	--	18200	--	--	--	--	35400	--
0945	5050		83	18	C	7.6								513.24						
														104						
12/10/68	5050		8.7	54	F	--	48400	--	--	--	--	--	--	18400	--	--	--	--	34000	--
0810	5050		01	12	C	8.0	45000							518.88						
														107						
02/06/69	5050		9.5	49	F	--	35800	--	--	--	--	--	--	12600	--	--	--	--	22700	--
0735	5050		83	9	C	8.2	38000							355.32						
														99						
04/08/69	5050		9.1	56	F	--	41300	--	--	--	--	--	--	15000	--	--	--	--	28100	--
0840	5050		87	13	C	8.3	41000							423.00						
														102						
06/03/69	5050		7.4	57	F	--	39900	--	--	--	--	--	--	15400	--	--	--	--	28900	--
0720	5050		72	14	C	7.9	40000							434.28						
														108						
08/12/69	5050		8.1	59	F	--	43200	--	--	--	--	--	--	17780	--	--	--	--	32800	--
0710	5050		81	15	C	8.1	41000							501.40						
														116						
E0 B 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND																				
10/14/68	5050		7.5	60	F	--	47900	--	--	--	--	--	--	17600	--	--	--	--	33800	--
1045	5050		76	16	C	8.2								496.32						
														103						
12/09/68	5050		7.7	53	F	--	45800	--	--	--	--	--	--	17200	--	--	--	--	32600	--
0820	5050		71	12	C	7.9	55000							485.04						
														105						
02/05/69	5050		9.8	49	F	--	27600	--	--	--	--	--	--	10100	--	--	--	--	18100	--
0720	5050		86	9	C	8.0	27500							284.82						
														103						
04/07/69	5050		7.8	57	F	--	37100	--	--	--	--	--	--	12700	--	--	--	--	23800	--
0840	5050		76	14	C	8.2	34000							358.14						
														96						
06/04/69	5050		8.9	60	F	--	34900	--	--	--	--	--	--	13000	--	--	--	--	24500	--
0840	5050		90	16	C	8.1	35000							366.60						
														105						
08/13/69	5050		6.8	63	F	--	42000	--	--	--	--	--	--	17000	--	--	--	--	31900	--
0810	5050		71	17	C	7.9	40000							479.40						
														114						
E0 B 757.7 225.6 SAN PABLO BAY AT POINT SAN PABLO																				
10/15/68	5050		7.3	61	F	--	46200	--	--	--	--	--	--	16700	--	--	--	--	32500	--
1020	5050		74	16	C	8.0								470.94						
														101						
12/10/68	5050		8.2	54	F	--	42000	--	--	--	--	--	--	15400	--	--	--	--	28900	--
0930	5050		77	12	C	7.9	40000							434.28						
														103						
02/06/69	5050		10.7	48	F	--	13200	--	--	--	--	--	--	4290	--	--	--	--	7830	--
0830	5050		92	9	C	7.7	15000							120.98						
														91						
04/08/69	5050		9.6	60	F	--	14000	--	--	--	--	--	--	4490	--	--	--	--	8640	--
1000	5050		97	16	C	7.9	15000							126.62						
														90						
06/03/69	5050		7.9	64	F	--	17000	--	--	--	--	--	--	5850	--	--	--	--	10900	--
0930	5050		83	18	C	7.6	17000							164.97						
														97						
08/12/69	5050		8.4	66	F	--	31600	--	--	--	--	--	--	12200	--	--	--	--	22700	--
0820	5050		89	19	C	7.9	31000							344.04						
														108						

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER						
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	TDS SUM	TH MCH	
E0 B 757.7 226.2 SAN PABLO STRAIT WEST OF THE BROTHERS																					
09/16/69 1200	5050 5050			--	--	30200	--	--	--	--	--	--	12500 352.50 116	--	--	--	--	21100	--		
12/17/68 1345	5001	3	10.5 91	32 9	F C	-- 7.6	-- 1500	--	--	--	--	--	--	--	--	--	--	--	--		
E0 B 802.3 207.1 SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ																					
10/30/68 1045	5006 5001	3	7.9 80	61 16	F C	-- 8.0	28250 20500	--	--	--	--	--	9000 253.80 89	--	--	--	24	18189	--		
11/25/68 0920	5006 5001	3	8.5 79	54 12	F C	-- 8.0	22400 23000	--	--	--	--	--	6100 172.02 76	--	--	--	10	1090	--		
12/18/68 1245	5006 5001	3	9.4 81	32 9	F C	-- 7.8	24600 24000	155 7.73	523 42.99	4400 191.40	164 4.20	-- 1.82	111 12.48	600 8225.60	8000	--	0.8	12	15200 13909	2530 2441	
01/28/69 1055	5006 5001	3	10.3 91	50 10	F C	-- 7.0	228 220	--	--	--	--	--	--	--	--	--	--	15	151	--	
02/26/69 0955	5006 5001	3	11.0 98	50 10	F C	-- 7.5	210 220	--	--	--	--	--	--	--	--	--	--	15	124	--	
03/26/69 1230	5006 5001	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27	69 69	
03/27/69 0930	5006 5001	3	9.1 89	57 14	F C	7.4 7.4	3600 3400	34 1.70	79 6.49	580 25.23	25 -64	0.0 1.31	80 22.46	1080 6.77	240	--	0.2	15	2100 2092	420 355	
05/08/69 0725	5006 5001	3	9.2 94	61 16	F C	7.7 7.5	-- 2000	--	--	--	--	--	--	--	520 14.66	--	--	--	17	1100	--
06/11/69 1445	5006 5001	3	8.6 93	66 19	F C	-- 7.4	3160 3500	--	--	--	--	--	--	--	--	--	--	--	15	2010	--
07/23/69 1130	5006 5001	3	9.6 109	70 21	F C	-- 8.3	14690 10000	--	--	--	--	--	--	4800 135.36 92	--	--	--	6.0	9840	--	
08/20/69 1040	5006 5001	3	9.6 106	68 20	F C	-- 8.2	12380 14000	--	--	--	--	--	--	4200 118.44 95	--	--	--	--	9340	--	
09/18/69 0935	5006 5001	3	7.8 86	68 20	F C	6.7 7.9	9220 11000	100 4.99	230 18.91	1800 78.30	84 2.15	0.0 10.19	-- 490	3240 91.37	--	--	1.15	7.0	6580 1196 1197		
E0 B 802.4 208.2 SUISUN BAY AT BENICIA (END OF PIER)																					
10/02/68 5050	5050 5050			--	--	33000	--	--	--	--	--	--	14000 394.80 119	--	--	--	--	--	--		
10/11/68 5050	5050 5050			--	--	26800	--	--	--	--	--	--	10300 290.46 108	--	--	--	--	--	--		
10/14/68 1300	5050 5050		8.2 85	62 17	F C	-- 8.0	28700	--	--	--	--	--	9700 273.54 95	--	--	--	--	18900	--		
10/17/68 5050	5050 5050			--	--	25800	--	--	--	--	--	--	8910 251.26 97	--	--	--	--	--	--		
10/23/68 5050	5050 5050			--	--	22400	--	--	--	--	--	--	8280 233.50 104	--	--	--	--	--	--		
11/01/68 5050	5050 5050			--	--	30400	--	--	--	--	--	--	11500 324.30 106	--	--	--	--	--	--		
11/13/68 5050	5050 5050			--	--	25900	--	--	--	--	--	--	9510 268.18 103	--	--	--	--	--	--		
11/20/68 5050	5050 5050			--	--	26900	--	--	--	--	--	--	10500 296.10 110	--	--	--	--	--	--		
12/03/68 5050	5050 5050			--	--	18400	--	--	--	--	--	--	6060 170.89 92	--	--	--	--	--	--		

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.H. DEPTH	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER TDS TH				
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SiO2	SUM	TH NCH	
E0 B 802.4 208.2 SUISUN BAY AT BENICIA (END OF PIER) CONTINUED																					
12/10/68 1100	5050 5050			8.8 82	54 12	F C	-- 7.7	25800 28000	--	--	--	--	--	--	8730 246.19 95	--	--	--	--	17700	--
12/12/68	5050 5050			--	--	F C	--	17900	--	--	--	--	--	--	6010 169.48 94	--	--	--	--	--	--
01/03/69	5050 5050			--	--	F C	--	14000	--	--	--	--	--	--	4560 128.59 91	--	--	--	--	--	--
02/05/69	5050 5050			--	--	F C	--	280	--	--	--	--	--	--	40 1.13 40	--	--	--	--	--	--
02/06/69 1015	5050 5050			11.5 98	47 8	F C	-- 7.4	238 370	--	--	--	--	--	--	29 .82 34	--	--	--	--	150	--
08/12/69 0950	5050 5050			6.4 66	7.5 22	F C	-- 7.8	9700 8500	--	--	--	--	--	--	3380 95.32 98	--	--	--	--	5970	--
E0 B 802.5 208.1 SUISUN BAY AT BENICIA (MIDDLE OF PIER)																					
03/11/69 1110	5050 5050				50 10	F C	--	602	--	--	--	--	--	--	111 3.13 51	--	--	--	--	--	--
03/24/69 1020	5050 5050				52 11	F C	--	1710	--	--	--	--	--	--	427 12.04 70	--	--	--	--	--	--
04/08/69 1120	5050 5050	6.65		9.4 95	60 16	F C	-- 7.4	352 350	--	--	--	--	--	--	49 1.38 39	--	--	--	--	229	--
04/15/69 1705	5050 5050				60 16	F C	--	390	--	--	--	--	--	--	69 1.95 50	--	--	--	--	--	--
06/06/69 1245	5050 5050			7.53 93	8.1 22	F C	-- 7.4	286 275	--	--	--	--	--	--	48 1.35 47	--	--	--	--	167	--
06/23/69 1330	5050 5050			--	--	F C	--	2790	--	--	--	--	--	--	782 22.05 79	--	--	--	--	--	--
07/03/69 1440	5050 5050			--	--	F C	--	2520	--	--	--	--	--	--	690 19.46 77	--	--	--	--	--	--
07/16/69 1525	5050 5050			--	--	F C	--	8400	--	--	--	--	--	--	2550 71.91 85	--	--	--	--	--	--
08/01/69 1205	5050 5050			--	--	F C	--	8240	--	--	--	--	--	--	2420 68.24 82	--	--	--	--	--	--
08/12/69 0950	5050 5050			7.5 66	71 22	F C	-- 7.8	9700 8500	--	--	--	--	--	--	3380 95.32 98	--	--	--	--	5970	--
08/19/69 1235	5050 5050			--	--	F C	--	11600	--	--	--	--	--	--	3710 104.62 90	--	--	--	--	--	--
E0 B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND																					
10/30/68 1200	5006- 5001			8.9 93	63 17	F C	-- 8.5	10000 9000	--	--	--	--	--	--	3100 87.42 87	--	--	--	8.1	6165	--
11/25/68 1020	5006 5001			10.0 93	54 12	F C	-- 7.4	5200 6500	--	--	--	--	--	--	1600 45.12 86	--	--	--	18	3127	--
12/18/68 1350	5006 5001			10.3 87	32 8	F C	-- 7.6	2910 3700	20 4	61 18	480 76	21 2	-- 1.41 5	86 2.46 9	820 23.12 86	--	--	--	22	1589 1478	299 229
01/28/69 1250	5006 5001			11.4 99	32 9	F C	-- 7.1	141 145	--	--	--	--	--	--	5.0 .14 9	--	--	--	14	100	--
02/26/69 1145	5006 5001			11.4 101	50 10	F C	-- 7.5	208 170	--	--	--	--	--	--	11 .31 14	--	--	--	16	127	--
03/27/69 1225	5006 5001			10.0 100	59 15	F C	7.3 7.4	220 230	16 .00 35	8.0 .66 29	18 .78 34	1.6 .04 2	0.0 1.31 56	80 .37 16	23 .65 28	--	--	--	15	185 139	73 8

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER						
							Ca	Mg	Na	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	TDS SUM	TH NCH	
E0 B 802.6 155.6 SACRAMENTO RIVER AT CHIPPS ISLAND CONTINUED																					
05/08/69 0850	5006 5001	J	9.8 102	63 17	F C	8.2 7.5	143 240	--	--	--	--	--	--	11 .31 21	--	--	--	16	69	--	
06/11/69 1605	5006 5001	J	8.9 97	66 19	F C	-- 7.6	120 130	--	--	--	--	--	--	--	--	--	--	15	80	--	
07/23/69 1255	5006 5001	J	8.7 102	73 23	F C	-- 7.8	1355 1500	--	--	--	--	--	--	375 10.58 78	--	--	--	11	760	--	
08/20/69 1235	5006 5001	J	8.8 100	70 21	F C	-- 7.9	1500 1800	--	--	--	--	--	--	415 11.70 78	--	--	--	10	970	--	
09/18/69 1120	5006 5001	J	9.0 100	68 20	F C	7.0 7.0	320 380	13 .05 20	11 .90 28	39 1.70 53	3.3 .08 2	0.0	--	18 .37 11	56 1.58 49	--	--	.45	12	202	78 78
E0 B 803.2 204.8 SUISUN BAY ABOVE AVON PIER																					
10/30/68 1110	5006 5001	J	7.8 99	61 16	F C	-- 8.0	24500 20000	--	--	--	--	--	--	8400 236.88 96	--	--	--	3.6	16398	--	
11/25/68 0935	5006 5001	J	8.8 92	54 12	F C	-- 7.4	17000 17500	--	--	--	--	--	--	5700 160.74 94	--	--	--	11	10906	--	
12/18/68 1300	5006 5001	J	9.9 86	32 9	F C	-- 7.6	21000 23500	117 6.84 3	442 30.33 17	3800 165.30 78	132 3.38 2	--	106 1.74 1	1000 20.80 10	6882 194.07 90	--	--	--	14	13600	2150 2065
01/28/69 1120	5006 5001	J	10.8 94	32 9	F C	-- 7.0	195 190	--	--	--	--	--	--	15 .42 21	--	--	--	13	136	--	
02/26/69 1020	5006 5001	J	10.9 97	50 10	F C	-- 7.4	216 200	--	--	--	--	--	--	20 .56 25	--	--	--	17	143	--	
03/27/69 1030	5006 5001	J	-- 95	-- 20	-- C	7.4 7.9	584 12000	18 .90 15	16 1.32 22	77 3.35 57	4.0 .10 1	0.0	--	48 1.00 17	126 3.55 60	--	--	--	15	346	111 111
05/08/69 0745	5006 5001	J	7.4 75	61 16	F C	-- 7.5	862 1000	--	--	--	--	--	--	255 7.19 83	--	--	--	18	523	--	
06/10/69 1400	5006 5001	J	9.4 102	66 19	F C	-- 7.7	-- 1100	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/22/69 0722	5006 5001	J	9.1 103	70 21	F C	-- 7.8	-- 10000	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/19/69 0830	5006 5001	J	8.6 95	68 20	F C	-- 7.9	-- 12000	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/17/69 0810	5006 5001	J	8.1 88	66 19	F C	-- 7.6	5250 7000	--	--	--	--	--	--	1700 47.94 91	--	--	--	9.0	3720	--	
E0 B 803.6 159.3 SUISUN BAY OFF MIDDLE POINT NEAR NICHOLS																					
10/30/68 1145	5006 5001	J	9.0 98	17 8	F C	-- 8.4	13800 12000	--	--	--	--	--	--	4800 135.36 98	--	--	--	--	8331	--	
11/25/68 1005	5006 5001	J	9.2 86	54 12	F C	-- 7.7	9900 11500	--	--	--	--	--	--	3500 98.70 99	--	--	--	14	6337	--	
12/18/68 1330	5006 5001	J	10.3 87	32 8	F C	-- 7.6	6400 6400	41 2.05 3	130 10.69 18	1030 44.81 76	42 1.08 2	--	89 1.46 2	230 4.78 8	1950 54.99 90	--	--	--	22	3730	635 562
01/28/69 1210	5006 5001	J	11.0 95	32 9	F C	-- 7.1	150 155	--	--	--	--	--	--	6.0 .17 11	--	--	--	12	113	--	
02/26/69 1110	5006 5001	J	11.2 99	50 10	F C	-- 7.2	180 180	--	--	--	--	--	--	13 .37 20	--	--	--	15	118	--	
03/27/69 1140	5006 5001	J	10.0 100	59 15	F C	7.3 7.5	235 250	8.0 .40 20	8.5 .70 36	19 .83 42	1.6 .04 2	0.0	80 1.31 05	18 .37 15	25 70 20	--	--	--	15	164	75 10
05/08/69 0830	5006 5001	J	9.8 102	63 17	F C	8.2 7.5	167 180	--	--	--	--	--	--	19 .54 32	--	--	--	16	76	--	

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. UEPIH	DU SAT	TEMP	PH LAB FLD	EC LAB FLU	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER						
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	TDS SUM	TH NCH	
E0 B 803.6 159.3 SUISUN BAY OFF MIDDLE POINT NEAR NICHOLS CONTINUED																					
06/10/69 1445	5006 5001	J	9.2 102	68 20	F C	7.6 7.6	-- 140	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/22/69 1110	5001	J	8.6 99	72 22	F C	-- 7.8	-- 3000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/20/69 1200	5006 5001	J	8.5 96	70 21	F C	-- 7.9	-- 4750	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/18/69 1055	5006 5001	J	9.1 101	68 20	F C	-- 7.8	620 800	--	--	--	--	--	152 4.29 69	--	--	--	12	396	--	--	--
E0 B 804.0 203.0 SUISUN BAY NEAR PRESTON POINT																					
10/30/68 1130	5006 5001	J	8.7 91	63 17	F C	-- 8.4	21200 16000	--	--	--	--	--	6900 194.58 91	--	--	--	30	13349	--	--	--
11/25/68 0950	5006 5001	J	9.1 85	54 12	F C	-- 7.9	12650 13000	--	--	--	--	--	4000 112.80 89	--	--	--	14	7843	--	--	--
12/18/68 1310	5006 5001	J	10.0 84	32 8	F C	-- 7.7	14100 14000	10 .50	292 24.00	2500 108.75	46 1.18	-- 1	105 1.72	600 12.48	4400 124.08	--	0.8	16	8730 7916	1421 1336	--
01/28/69 1210	5006 5001	J	11.0 95	32 9	F C	-- 7.1	-- 155	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/26/69 1035	5006 5001	J	11.1 96	32 9	F C	-- 7.5	196 220	--	--	--	--	--	16 .45 22	--	--	--	15	132	--	--	--
03/27/69 1030	5006		--	--		--	284	16 .80 28	9.5 .78 27	26 1.13 39	2.1 .05 1	--	16 .33 11	37 1.04 36	--	--	--	15	211	79 79	--
03/27/69 1055	5006 5001	J	10.2 102	59 15	F C	7.5 7.4	284 325	16 .80 28	9.5 .78 27	26 1.13 39	2.1 .05 1	0.0	16 .33 11	37 1.04 36	--	--	--	15	211	79 79	--
05/08/69 0805	5006 5001	J	9.5 97	61 16	F C	8.3 7.6	167 180	--	--	--	--	--	--	61 1.72	--	--	--	18	174	--	--
06/10/69 1425	5001		9.3 101	66 19	F C	-- 7.7	-- 160	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/22/69 1045	5001		8.7 98	70 21	F C	-- 7.9	-- 7000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/19/69 0900	5006 5001		8.9 97	66 19	F C	-- 8.9	-- 9000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/17/69 0840	5006 5001	J	9.6 104	66 19	F C	-- 7.6	1080 1600	--	--	--	--	--	--	290 8.18 75	--	--	--	12	660	--	--
E0 B 804.4 156.2 MONKER BAY NEAR WHEELER POINT																					
10/28/68 1025	5006 5001	J	8.5 87	61 16	F C	-- 7.8	10000 8500	--	--	--	--	--	--	3200 90.24 90	--	--	--	--	6644	--	--
11/26/68 0945	5006 5001	J	9.4 86	52.1F 11.2C		-- 7.7	4950 5400	--	--	--	--	--	--	1500 42.30 85	--	--	--	16	2615	--	--
12/17/68 1320	5006 5001	J	10.5 89	32 8	F C	-- 7.6	4450 4500	13 .05 1	99 8.14 17	850 36.98 79	30 .77 2	0.0	87 1.43 4	120 2.50 6	1300 36.66 90	--	--	20	2504 2475	438 367	--
01/29/69 1140	5006 5001	J	11.6 98	32 8	F C	-- 7.4	148 160	--	--	--	--	--	--	6.0 .17 11	--	--	--	15	105	--	--
02/27/69 1105	5006 5001	J	11.2 97	32 9	F C	-- 7.5	196 220	--	--	--	--	--	--	16 .45 22	--	--	--	16	131	--	--
03/28/69 1125	5006 5001	J	10.5 105	59 15	F C	7.4 7.4	225 230	16 .00 35	8.9 .73 32	18 .78 34	1.6 .04 1	0.0	19 .40 17	23 .65 28	--	--	--	15	145	77 77	--
05/07/69 0755	5006 5001	J	9.5 99	63 17	F C	7.8 7.6	154 180	--	--	--	--	--	--	15 .42 27	--	--	--	16	--	--	--

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER							
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	TOS SUM	TM NCH		
E0 B 804.4 156.2 HONKER BAY NEAR WHEELER POINT							CONTINUED															
06/10/69 1505	5006 5001			9.1 99	66 19	F C	-- 7.6	-- 90	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/22/69 1135	5006 5001			8.1 93	72 22	F C	-- 7.9	-- 1000	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/19/69 0935	5006 5001			8.5 94	68 20	F C	-- 7.6	-- 2800	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/17/69 0920	5006 5001			8.9 97	66 19	F C	-- 7.7	310 400	--	--	--	--	--	53 1.49 48	--	--	--	14	196	--	--	
E0 B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH																						
10/28/68 1000	5006 5001	3		9.0 94	63 17	F C	-- 8.1	15800 13000	--	--	--	--	--	5400 152.28 96	--	--	--	--	11329	--	--	
11/26/68 0900	5050 5050			--	--		8.1	11100	70 3.49	248 20.39	1850 80.48	60 1.54	0.0	97 1.59	507 10.55	3280 92.50	3.3 .05	--	1.1	12	6900 6079	1195 1115
11/26/68 0905	5006 5001	3		9.4 86	52.7 11.5	F C	-- 7.7	10900 16000	--	--	--	--	--	3600 101.52 93	--	--	--	14	6474	--	--	
12/17/68 1230	5006 5001	3		10.1 85	32 8	F C	-- 7.7	9900 10000	48 2.40	204 16.77	1600 69.60	63 1.61	--	95 1.56	330 6.86	3000 84.60	--	0.8	16	5470 5308	957 880	
01/29/69 1030	5006 5001	3		11.6 98	32 8	F C	-- 7.4	138 150	--	--	--	--	--	5.0 .14 10	--	--	--	15	97	--	--	
02/27/69 1010	5006 5001	3		11.4 99	32 9	F C	-- 7.4	149 200	--	--	--	--	--	11 .31 20	--	--	--	16	122	--	--	
03/28/69 1025	5006 5001	3		10.4 104	59 15	F C	7.5 7.5	243 250	16 .80	9.1 .75	20 .87	1.8 .05	0.0	--	14 .29	28 .79	--	--	15	157 78	78	
05/07/69 0705	5006 5001	3		9.7 88	51.9 11.1	F C	7.6 7.6	784 900	--	--	--	--	--	--	210 5.92 75	--	--	--	19	465	--	
06/11/69 1525	5006 5001	3		9.0 98	66 19	F C	7.5 7.5	123 180	--	--	--	--	--	--	--	--	--	--	14	106	--	
07/23/69 1215	5006 5001	3		8.6 97	70 21	F C	-- 8.0	5215 6000	--	--	--	--	--	--	1950 54.99 105	--	--	--	8.0	3480	--	
08/20/69 1125	5006 5001	3		9.4 106	70 21	F C	-- 8.1	4620 5400	--	--	--	--	--	--	145 4.09 8	--	--	--	5.0	3170	--	
09/18/69 1015	5006 5001	3		9.0 100	68 20	F C	6.9 7.9	1140 1800	17 .85	28 2.30	180 7.83	10 .26	0.0	--	50 1.04	310 8.74	--	--	12	675 158	158	
E0 S 809.2 205.3 CORNELIA SLOUGH AT CYGNUS																						
10/01/68 1230	5001	6.16 3		63 17	F C	-- 9500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/09/68 1305	5001	3		61 16	F C	-- 600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/16/68 1130	5001	3		59 15	F C	-- 9000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/31/68 1245	5006 5001	3		--	--	12250 12200	95 4.74	281 23.10	2200 95.70	74 1.89	0.0	118 1.94	640 13.31	4100 115.62	--	--	--	1.2	8373 7449	1392 1296	--	
11/15/68 1015	5001	3		--	--	9000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/16/68 1030	5001	3		9.7 80	32 7	F C	-- 7.5	-- 9500	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/12/69 1015	5006 5001	3		8.5 74	32 9	F C	7.0 7.1	1745	26 1.30	40 3.29	230 10.61	13 .33	0.0	88 1.44	102 2.12	396 11.17	--	--	17	886 867	230 158	

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	DU SAT	TEMP	PH LAB FLD	EC LAB FLU	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER						
							CA	MG	NA	K	CO3	MC03	SO4	CL	NO3	F	B	SI02	TOS SUM	IM NCH	
E0 S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS CONTINUED																					
03/14/69 1010	5006 5001	7.20 3	9.2 84	52 11	F C	-- 6.8	-- 1050	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/11/69 0945	5006 5001	7.02 3	8.7 89	61 16	F C	-- 7.4	-- 1080	--	--	--	--	--	--	--	--	--	--	--	--	--	
05/12/69 1035	5006 5001	5.00 3	6.8 74	66 19	F C	-- 7.2	-- 2000	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/12/69 1145	5006 5001	4.27 3	5.5 90	66 19	F C	-- 7.1	-- 1600	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/08/69 1120	5006 5001	6.00 3	7.1 82	72 22	F C	-- 7.4	-- 800	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/05/69 1030	5006 5001	5.70 3	7.4 85	72 22	F C	-- 7.4	-- 5000	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/03/69 0945	5006 5001	6.25 3	6.7 79	73 23	F C	-- 7.5	-- 4000	--	--	--	--	--	--	--	--	--	--	--	--	--	
E0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND																					
10/16/68 1415	5001	3	63 17	F C	-- --	-- 5800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/22/68 1405	5001	3	61 16	F C	-- --	-- 8000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/30/68 1215	5006 5001	6.00 3	8.2 82	59 15	F C	-- 7.7	9200 9200	55 2.74	217 17.84	1600 69.60	54 1.38	0.0 2.31	141 9.98	480 81.78	2900 87	--	--	--	6.6	5918 5382	1030 915
11/14/68 1140	5001	3	55 13	F C	-- --	-- 11000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/16/68 1350	5001	3	8.9 77	32 9	F C	-- 7.4	-- 10000	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/14/69 1430	5006 5001	3	8.9 85	55 13	F C	-- 7.7	-- 1380	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/24/69 1330	5006 5001	2	8.2 82	59 15	F C	-- 7.5	-- 1600	--	--	--	--	--	--	--	--	--	--	--	--	--	
05/12/69 0230	5006 5001	3.00 3	8.7 93	64 18	F C	-- 7.5	-- 1100	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/12/69 1435	5006 5001	3	7.4 80	66 19	F C	-- 7.3	-- 750	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/05/69 1500	5006 5001	2	7.9 97	77 25	F C	-- 7.6	-- 3500	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/03/69 1405	5006 5001	2.50 3	7.1 84	73 23	F C	-- 7.5	-- 4600	--	--	--	--	--	--	--	--	--	--	--	--	--	
E0 S 811.0 204.8 CHADBOURNE SLOUGH AT CHADBOURNE ROAD																					
10/01/68 1355	5001	8.65 3	66 19	F C	-- --	-- 8000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/09/68 1145	5001	3	54 12	F C	-- --	-- 1900	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/16/68 1325	5001	3	59 15	F C	-- --	-- 3500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/31/68 1430	5006 5001	3	7.8 61	63 17	F C	-- 7.4	8800 8500	74 3.71	228 18.75	1600 69.60	50 1.28	0.0 2.30	140 9.98	480 81.78	2900 87	--	--	--	4.0	5887 5405	1125 1011
11/15/68 1050	5001	3	--	--	--	--	9000	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	UU SAT	TEMP	PH LAB FLJ	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER TDS SUM				TM MCM
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	SUM	
EO S 811.0 204.8 CHAUBOURNE SLOUGH AT CHAUBOURNE ROAD CONTINUED																				
12/16/68 1155	5001	3	75	7.1 7 C	32 7.4	F 10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/27/69 1135	5006 5001	10.23 3	6.1 50	31.9F 6.5C	7.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/12/69 1230	5006 5001	10.0 3	52 71	F 11 C	7.4 7.3	625 650	28 1.90	21 1.73	55 2.39	4.0 .10	0.0	99 1.62	76 1.58	85 2.40	--	--	--	20	346 338	157 76
03/14/69 1145	5006 5001	7.55 3	8.8 82	54 12 C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/69 1110	5006 5001	8.90 3	8.3 86	63 17 C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/12/69 1245	5006 5001	8.90 3	8.3 90	66 19 C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/12/69 1315	5006 5001	8.00 3	6.4 70	66 19 C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/08/69 1250	5006 5001	8.30 3	6.8 78	72 22 C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/05/69 1300	5006 5001	7.00 3	6.9 83	75 24 C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/03/69 1150	5006 5001	8.30 3	6.8 80	73 23 C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EO S 811.2 158.2 MONTEZUMA SLOUGH NEAR BELOONS LANDING																				
10/03/68 1530	5050 5050	--	--	--	--	12900	--	--	--	--	--	--	4670 131.69 102	--	--	--	--	7040	--	--
10/10/68 1530	5050 5050	--	--	--	--	12200	--	--	--	--	--	--	3940 111.11 91	--	--	--	--	7320	--	--
10/17/68 1500	5050 5050	--	--	--	--	11900	--	--	--	--	--	--	3830 108.01 90	--	--	--	--	7030	--	--
10/25/68 1405	5050 5050	--	--	--	--	11900	--	--	--	--	--	--	3740 105.47 88	--	--	--	--	7140	--	--
10/31/68 1635	5050 5050	--	--	--	--	12100	--	--	--	--	--	--	3930 110.83 91	--	--	--	--	6930	--	--
11/07/68 1500	5050 5050	--	--	--	--	12200	--	--	--	--	--	--	3940 111.11 91	--	--	--	--	7430	--	--
11/14/68 1500	5050 5050	--	--	--	--	11900	--	--	--	--	--	--	3900 109.98 92	--	--	--	--	7240	--	--
11/21/68 1600	5050 5050	--	--	--	--	11500	--	--	--	--	--	--	3790 106.88 92	--	--	--	--	7220	--	--
11/29/68 1300	5050 5050	--	--	--	--	11500	--	--	--	--	--	--	3640 102.65 89	--	--	--	--	6730	--	--
12/05/68 1300	5050 5050	--	--	--	--	11000	--	--	--	--	--	--	3390 95.60 86	--	--	--	--	6620	--	--
12/12/68 1400	5050 5050	--	--	--	--	10900	--	--	--	--	--	--	3480 98.14 90	--	--	--	--	6700	--	--
12/19/68 1430	5050 5050	--	--	--	--	7010	--	--	--	--	--	--	2070 58.37 83	--	--	--	--	4130	--	--
12/30/68 1400	5050 5050	--	--	--	--	7570	--	--	--	--	--	--	2260 63.73 84	--	--	--	--	4330	--	--
01/16/69 1355	5050 5050	--	--	--	--	4850	--	--	--	--	--	--	1440 40.61 83	--	--	--	--	2610	--	--

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	00 SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER					
							CA	MG	NA	K	CO3	HCO3	SO4	CL	N03	F	H	S102	TDS SUM	TH NCH
E0 S 811.2 158.2 MONTEZUMA SLOUGH NEAR BELLOONS LANDING CONTINUED																				
02/04/69	5050			49 F	--	879	--	--	--	--	--	--	202	--	--	--	--	--	480	--
1230	5050			9 C									5.70							
													64							
02/18/69	5050			49 F	--	675	--	--	--	--	--	--	139	--	--	--	--	--	374	--
1525	5050			9 C									3.92							
03/06/69	5050			54 F	--	710	--	--	--	--	--	--	136	--	--	--	--	--	388	--
1650	5050			12 C									3.84							
													54							
03/21/69	5050			49 F	--	1360	--	--	--	--	--	--	300	--	--	--	--	--	792	--
1826	5050			9 C									8.46							
													62							
04/28/69	5050			62 F	--	585	--	--	--	--	--	--	117	--	--	--	--	--	320	--
1200	5050			17 C									3.30							
													56							
06/02/69	5050			--	--	330	--	--	--	--	--	--	58	--	--	--	--	--	192	--
1800	5050												1.64							
													49							
06/23/69	5050			--	--	422	--	--	--	--	--	--	83	--	--	--	--	--	251	--
1715	5050												2.34							
													55							
07/03/69	5050			--	--	572	--	--	--	--	--	--	119	--	--	--	--	--	333	--
0845	5050												3.36							
													58							
07/17/69	5050			--	--	869	--	--	--	--	--	--	196	--	--	--	--	--	484	--
0900	5050												5.53							
													63							
08/01/69	5050			--	--	1750	--	--	--	--	--	--	444	--	--	--	--	--	990	--
1415	5050												12.52							
													71							
08/19/69	5050			--	--	3270	--	--	--	--	--	--	914	--	--	--	--	--	1930	--
1510	5050												25.77							
													78							
09/02/69	5050			--	--	4050	--	--	--	--	--	--	1150	--	--	--	--	--	2430	--
0725	5050												32.43							
													80							
09/15/69	5050			--	--	2860	--	--	--	--	--	--	784	--	--	--	--	--	1600	--
0820	5050												22.11							
													77							
E0 S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD																				
10/01/68	5001	3		70 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1420				21 C		9500														
10/16/68	5001	3		63 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1400				17 C		10000														
10/31/68	5006	3		--	--	11000	95	262	2100	66	0.0	122	560	3600	--	--	--	22	7543	1316
1445	5001					11000	4.74	21.54	91.35	1.69		2.00	11.65	101.52				6765	1217	
							4	18	77	1		2	10	88						
11/15/68	5001	3		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1115						10000														
12/16/68	5001	3	9.2	32 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1255			78	8 C	7.4	10500														
01/27/69	5006	3	10.4	32 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1210	5001		86	7 C	7.1	550														
02/12/69	5006	3	10.0	32 F	7.1	1080	22	28	130	7.0	0.0	76	74	234	--	--	--	16	568	170
1420	5001		87	9 C	7.3	1090	1.10	2.30	5.66	.18		1.25	1.54	6.60				548	108	
							12	25	61	2		13	16	70						
03/14/69	5006	3	9.9	52 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1340	5001		90	11 C	7.0	1100														
04/11/69	5006	3	8.9	63 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1300	5001		93	17 C	7.2	900														
05/12/69	5006	3	8.8	60 F	7.1	630	13	16	89	4.8	0.0	70	40	142	--	--	--	10	340	99
1345	5001		96	19 C	7.3	700	.05	1.32	3.87	.12		1.15	.83	4.00				349	42	
							11	22	65	2		19	14	67						
06/12/69	5006	3	8.4	66 F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1410	5001		91	19 C	7.4	475														

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. UEPH	DU SAT	TEMP	PH LAB FLU	EC LAB FLU	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER							
							CA	MG	NA	K	CO3	HC03	SO4	CL	NO3	F	B	SiO2	TOS SUM	TM MCH		
E0 S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD CONTINUED																						
07/08/69 1410	5006 5001		J	6.8 60	73 23	F C	-- 7.5	-- 610	--	--	--	--	--	--	--	--	--	--	--	--		
08/05/69 1420	5006 5001		J	6.9 63	75 24	F C	7.3 7.4	2740 3200	30 1.50	58 4.77	450 19.58	24 .61	0.0 1.23	75 2.70	130 22.56	800 85	--	--	0.5	8.0	1560 1537	316 255
09/03/69 1330	5006 5001		J	7.0 64	75 24	F C	-- 7.5	-- 4400	--	--	--	--	--	--	--	--	--	--	--	--		
E0 S 811.5 207.2 CORDELIA SLOUGH AT UPPER END NEAR CORDELIA																						
10/01/68 1310	5001		J	61 16	F C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10/16/68 1255	5001		J	54 12	F C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10/31/68 1400	5006 5001		J	--	--	--	--	1700 1700	32 1.61	56 4.65	240 10.44	5.0 .13	0.0 3.56	217 1.87	90 11	410 11.56	--	--	--	11	1031 952	313 135
04/11/69 1030	5006 5001	7.02	J	7.1 74	63 17	F C	-- 7.5	-- 1800	--	--	--	--	--	--	--	--	--	--	--	--		
05/12/69 1135	5006 5001		J	7.4 77	63 17	F C	-- 7.6	-- 700	--	--	--	--	--	--	--	--	--	--	--	--		
06/12/69 1230	5006 5001		2	7.0 76	66 19	F C	-- 7.6	-- 460	--	--	--	--	--	--	--	--	--	--	--	--		
07/08/69 1210	5006 5001		3	6.6 76	72 22	F C	-- 7.6	-- 650	--	--	--	--	--	--	--	--	--	--	--	--		
08/05/69 1145	5006 5001		J	5.0 59	73 23	F C	-- 7.4	-- 1200	--	--	--	--	--	--	--	--	--	--	--	--		
09/03/69 1055	5006 5001		3	6.0 68	70 21	F C	-- 7.6	-- 2000	--	--	--	--	--	--	--	--	--	--	--	--		
E0 S 812.7 207.8 GREEN VALLEY CREEK AT CORDELIA																						
12/16/68 1100	5001		J	7.4 61	32 7	F C	-- 7.1	-- 1450	--	--	--	--	--	--	--	--	--	--	--	--		
01/27/69 1035	5001		J	11.4 96	32 8	F C	-- 7.2	-- 170	--	--	--	--	--	--	--	--	--	--	--	--		
02/12/69 1110	5006 5001		3	11.0 95	32 9	F C	7.2 7.3	172	9.5 .47	6.5 .53	12 .52	3.0 .08	0.0 .95	58 .42	20 26	9.0 .25	--	--	0.5	34	125 123	50 3
03/14/69 1105	5001		3	12.2 110	50.9F 10.5C	F C	-- 6.7	-- 260	--	--	--	--	--	--	--	--	--	--	--	--		
E0 S 813.6 201.2 HILL SLOUGH AT GRIZZLY ISLAND ROAD																						
10/01/68 1430	5001		J	63 17	F C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10/16/68 1350	5001		J	59 15	F C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10/22/68 1450	5001		J	59 15	F C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
10/30/68 1355	5006 5001		3	8.3 83	59 15	F C	-- 8.1	1000 1000	21 1.09	38 3.18	125 5.44	4.0 .10	0.0 3.05	186 1.66	80 16	205 5.78	--	--	--	10	621 576	213 61
11/15/68 1125	5001		J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
12/16/68 1235	5001		3	7.3 62	32 8	F C	-- 7.4	-- 7000	--	--	--	--	--	--	--	--	--	--	--	--		

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. DEPTH	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER TDS TH					
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	SUM	TH NCM	
E0 S 813.6 201.2 HILL SLOUGH AT GRIZZLY ISLAND ROAD CONTINUED																					
01/27/69 1150	5006 5001	J	7.8 66	32 8	F C	-- 8.2	-- 520	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/12/69 1325	5006 5001	J	7.6 69	52 11	F C	7.2 7.3	454 560	19 .45	9.5 .78	62 2.70	5.0 .13	0.0	--	30 .62	87 2.45	--	--	1.0	9.0	268	86 86
03/14/69 1315	5006 5001	J	8.1 77	55 13	F C	-- 7.4	-- 1850	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/69 1230	5006 5001	J	9.5 101	64 18	F C	-- 7.8	-- 2400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/12/69 0115	5006 5001	J	8.4 69	64 18	F C	7.5 7.8	2213 2300	43 2.15	55 4.52	356 15.49	15 .38	0.0	190 3.12	160 3.33	540 15.23	--	--	--	10	1380 1272	334 178
06/12/69 1340	5006 5001	J	8.6 72	66 19	F C	-- 7.6	-- 2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/08/69 1335	5006 5001	4.00 J	7.2 83	72 22	F C	-- 7.8	-- 1600	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/05/69 1345	5006 5001	J	8.8 82	75 24	F C	7.5 7.5	2270 2600	40 2.00	54 4.44	365 15.88	19 .49	0.0	174 2.85	130 2.70	590 16.64	--	--	0.7	11	1340 1295	322 180
09/03/69 1250	5006 5001	4.00 J	8.2 72	72 22	F C	-- 7.6	-- 4100	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE TIME	LAB SAMPLER	G.M. U	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER TDS TH					
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	SI02	SUM	TH NCM	
E3 1100.50 NAPA RIVER AT DUTTON LANDING																					
10/15/68 0945	5050 5050	J	8.2 84	61 16	F C	-- 7.6	30200	--	--	--	--	--	--	--	10900 307.38 101	--	--	--	--	20900	--
12/09/68 1120	5050 5050	J	9.1 82	51 11	F C	-- 7.7	24400	--	--	--	--	--	--	--	8910 251.26 102	--	--	--	--	16500	--
02/05/69 1150	5050 5050	J	10.4 72	50 16	F C	-- 7.2	970 1150	--	--	--	--	--	--	--	218 6.15 63	--	--	--	--	524	--
04/07/69 1200	5050 5050	J	8.3 85	61 16	F C	-- 8.0	2530 3000	--	--	--	--	--	--	--	650 18.33 72	--	--	--	--	1420	--
06/04/69 1225	5050 5050	J	8.4 72	70 21	F C	-- 8.2	6520 6500	--	--	--	--	--	--	--	1940 54.71 83	--	--	--	--	3710	--
08/13/69 1105	5050 5050	J	8.7 78	73 23	F C	-- 7.5	20700 20500	--	--	--	--	--	--	--	7530 212.35 102	--	--	--	--	13800	--
E3 1500.00 NAPA RIVER NEAR ST. HELENA																					
04/23/69 1150	5050 5050	1.45	9.7 76	59 15	F C	8.1 7.2	216 210	17 .85	9.6 .79	14 .61	2.4 .06	0.0	95 1.56	13 .27	10 .28	3.3 .05	--	0.3	--	160 116	82 4
09/15/69 0700	5050 5050	.74 5.0	8.3 54	61 16	F C	7.3 7.0	334 320	52 2.59	3.7 .30	16 .70	-- 20	0.0	173 2.84	-- 85	9.9 .28	-- 8	--	--	--	--	145 3

TABLE D-2
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. U	DU SAT	TEMP	PH LAB PLU	EC LAB FLU	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE				MILLIGRAMS PER LITER						
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	S	SI02	T05 SUM	TM NCH	
E5 1150.00 ALAMEDA CREEK NEAR NILES																					
10/16/68 0900	S050 S050		10.4 10.2	58 14	F C	8.0 8.0	509	--	--	50	--	0.0	129	--	68	--	--	0.2	--	--	131 25
11/07/68 1115	S050 S050	3.04	10.1 9.8	57 14	F C	8.0 7.5	529 526	--	--	54 44	--	0.0	126 39	--	71 37	--	--	0.3	--	--	132 29
12/10/68 1345	S050 S050	2.06	12.2 11.5	55 13	F C	8.3 7.5	586 660	36	19	68	--	0.0	152 36	--	88 36	140	--	0.4	--	--	172 48
01/08/69 1027	S050 S050	5.90	11.4 9.6	48 8	F C	7.7 7.8	619	32	21	59	--	0.0	127 33	--	72 32	--	--	0.5	--	--	168 64
02/06/69 1230	S050 S050	6.03	11.1 9.4	47 8	F C	8.1 8.2	344 295	27	10	27	--	0.0	130 61	--	23 18	5.1	--	0.3	--	--	111 5
03/12/69 1115	S050 S050	4.10 25	11.6 10.3	56 10	F C	8.3 7.9	492 480	40	20	29	--	0.0	162 54	--	31 17	--	--	0.3	--	--	183 50
04/08/69 1330	S050 S050	3.07	12.2 12.3	60 16	F C	8.2 8.5	517 500	34	21	37	1.7	0.0	178 57	52	38 21	3.7	--	0.3	--	290 275	171 25
05/01/69 1030	S050 S050	2.95 5	11.4 11.6	61 16	F C	8.3 8.1	861 835	66	31	69	3.1	0.0	273 50	105	74 23	9.6	--	1.2	--	510 493	293 69
06/04/69 0645	S050 S050	2.94	8.1 8.8	66 19	F C	8.3 8.4	720 750	54	29	60	--	0.0	235 53	--	65 25	6.8	--	0.5	--	--	258 66
08/13/69 0700	S050 S050	2.91	8.0 8.7	66 19	F C	8.4 8.1	667 490	46	28	53	--	8.0	221 4	--	52 54	7.7	--	0.5	--	--	236 42
E5 1400.00 ARROYO DEL VALLE NEAR LIVERMORE																					
04/25/69 1130	S050 S050	2.44		57 14	F C	8.3 8.1	304 280	29	13	14	1.8	0.0	132 70	31	10 9	1.2	--	0.8	--	181 165	128 20
E6 9250.00 CUYUTE CREEK NEAR MADRONE																					
04/28/69 1315	S050 S050	2.01	10.7 11.2	63 17	F C	8.2 8.0	295 300	29	14	12	1.6	0.0	135 72	29	8.4 8	2.0	--	0.5	--	184 163	130 20
E6 5250.00 LOS GATOS CREEK AT LOS GATOS																					
05/01/69 0915	S050 S050		11.4 10.7	54 12	F C	8.0 7.8	264 260	28	12	9.4	1.1	0.0	122 72	28	6.2 6	1.1	--	0.3	--	164 146	120 20
09/26/69 1130	S050 S050	4.44	9.0 10.3	71 22	F C	8.1 7.8	327 300	36	13	13	--	0.0	145 72	--	8.5 7	--	--	--	--	--	147 28
E8 4302.01 CORINUA LOS TRANCOS CR NEAR HALF MOON BAY																					
03/07/69 1130	S050 S050			--		7.9 7.9	352	--	--	24	--	0.0	74	24	33	15	--	--	--	--	105 45
F8 2100.00 NAVARRO RIVER NEAR NAVARRO																					
11/19/68 1450	S050 S050	4.38	11.9 11.5	57 14	F C	8.5 7.7	274	--	--	14	--	5.0	138	--	8.5	--	--	0.2	--	--	118 0
01/23/69 0920	S050 S050	11.39 347	11.7 10	47 8	F C	7.9 7.1	117	--	--	6.7	--	0.0	56 78	--	5.2 12	--	--	0.0	--	--	46 0
03/05/69 1030	S050 S050	8.42 161	11.8 10.2	48 9	F C	7.2 7.4	139	--	--	7.0	--	0.0	69 81	--	4.9 10	--	--	0.0	--	--	66 10
05/15/69 0845	S050 S050	4.42 85	10.3 10.4	60 16	F C	7.9 7.4	240	24	9.7	10	1.7	0.0	122 81	12	8.3 9	0.0	--	0.2	--	123 126	100 0
07/17/69 0900	S050 S050	3.77 17	9.2 8.8	65 16	F C	8.1 7.3	258	--	--	13	--	0.0	136 86	--	8.3 8	--	--	0.1	--	--	108 0
09/11/69 0920	S050 S050	3.00 6.4	8.5 8.9	63 17	F C	7.6 7.1	260	27	11	12	0.1	0.0	141 84	8.7	8.9 7	0.0	--	0.1	--	134 137	114 0

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.M. Q	DO SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER					
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	F	B	S102	TDS SUM	TH NCH	
F8 2/20.00 BIG RIVER NEAR MOUTH																					
11/19/68	5050		11.4	55	F	8.4	230	--	--	13	--	2.0	117	--	7.7	--	--	0.4	--	--	99
1605	5050	75	10.8	13	C	7.5		--	--	.57	--	.07	1.92	--	.22	--	--	--	--	0	
										.24		3	.63		.9						
01/23/69	5050		12.1	47	F	7.7	96	--	--	6.0	--	0.0	44	--	5.0	--	--	0.0	--	--	37
1105	5050	100	10.3	8	C	7.1		--	--	.26	--		.72	--	.14	--	--	--	--	1	
										.27			.75		.14						
03/05/69	5050	9.66	11.9	47	F	7.1	109	--	--	5.8	--	0.0	54	--	4.8	--	--	0.0	--	--	42
0925	5050	65	10.1	8	C	7.9		--	--	.25	--		.89	--	.14	--	--	--	--	0	
										.22			.81		.12						
05/15/69	5050		10.4	58	F	7.8	188	18	7.0	7.2	1.5	0.0	93	7.7	7.1	0.0	--	0.2	--	104	74
0725	5050	5	10.2	14	C	7.3		.70	.58	.40	.04		1.53	.16	.20					96	0
								.47	.30	.21	.2		.81	.8	.11						
07/17/69	5050	6.63	8.1	52	F	8.1	202	--	--	12	--	0.0	100	--	7.3	--	--	0.2	--	--	83
0700	5050	25	8.4	17	C	7.3		--	--	.52	--		1.64	--	.21	--	--	--	--	1	
										.25			.81		.10						
09/11/69	5050	6.55	8.5	60	F	7.8	202	20	7.3	11	0.1	0.0	106	5.3	7.7	0.0	--	0.2	--	99	80
0800	5050	25	8.6	16	C	7.1		1.00	.60	.48			1.74	.11	.22					104	0
								.48	.29	.23			.84	.5	.11						
F8 3200.00 NOYO RIVER NEAR FORT BRAGG																					
11/20/68	5050		10.4	53	F	8.3	182	--	--	11	--	0.0	90	--	8.0	--	--	0.1	--	--	74
0850	5050	10.0	9.6	12	C	7.3		--	--	.48	--		1.48	--	.23	--	--	--	--	0	
										.26			.81		.12						
01/23/69	5050	8.71	12.0	47	F	7.5	81	--	--	5.6	--	0.0	35	--	5.1	--	--	0.0	--	--	28
1155	5050	168	10.2	8	C	7.0		--	--	.24	--		.57	--	.14	--	--	--	--	0	
										.29			.70		.17						
03/05/69	5050	5.90	12.1	46	F	7.0	92	--	--	5.5	--	0.0	43	--	4.8	--	--	0.0	--	--	35
0800	5050	67	10.1	8	C	7.1		--	--	.24	--		.71	--	.14	--	--	--	--	0	
										.26			.77		.15						
05/15/69	5050	3.53	10.6	56	F	7.6	145	14	3.6	8.0	1.0	0.0	68	5.3	8.6	0.0	--	0.1	--	78	52
0630	5050	5	10.2	13	C	7.3		.70	.30	.35	.03		1.12	.11	.24					74	0
								.51	.22	.25	.2		.76	.7	.16						
07/16/69	5050	2.65	9.9	58	F	7.9	162	--	--	10	--	0.0	82	--	7.8	--	--	0.0	--	--	63
1720	5050	13	11.0	20	C	7.3		--	--	.44	--		1.34	--	.22	--	--	--	--	0	
										.27			.82		.13						
09/11/69	5050	2.59	8.2	58	F	7.6	152	13	5.5	9.7	1.2	0.0	74	2.6	7.9	0.0	--	0.0	--	88	55
0710	5050	8.4	8.1	14	C	7.1		.65	.45	.42	.03		1.21	.05	.22					76	0
								.42	.29	.27	.2		.82	.3	.15						
F9 1080.50 RUSSIAN RIVER AT GUERNEVILLE																					
11/06/68	5050	4.14	8.3	57	F	8.1	327	--	--	15	--	0.0	154	--	13	--	--	0.5	--	--	140
0830	5050		8.1	14	C	7.4	315	--	--	.65	--		2.53	--	.37	--	--	--	--	14	
										.19			.77		.11						
01/07/69	5050	6.82	10.3	50	F	7.6	271	23	14	8.9	--	0.0	135	--	8.0	--	--	0.3	--	--	116
1030	5050		9.1	10	C	7.4		1.15	1.17	.39	--		2.21	--	.23	--	--	--	--	6	
								.42	.43	.14			.81		.8						
03/13/69	5050	9.70	10.6	48	F	7.9	249	23	14	7.0	--	0.0	125	--	4.8	--	--	0.1	--	--	119
0845	5050	50	9.1	9	C	7.4	300	1.15	1.23	.30	--		2.05	--	.14	--	--	--	--	17	
								.46	.49	.12			.82		.5						
04/24/69	5050	7.80	9.9	58	F	8.2	247	24	12	8.8	1.2	0.0	126	15	5.5	2.8	--	0.6	--	153	108
1200	5050		9.7	14	C	7.8	245	1.20	.99	.38	.03		2.07	.31	.16	.05	--	--	--	132	5
								.46	.38	.15	.1		.80	.12	.6	.2					
07/03/69	5050	2.28	7.6	74	F	8.3	292	26	16	11	--	0.0	159	--	7.6	--	--	--	--	134	
0930	5050		7.0	23	C	7.7	270	1.30	1.38	.48	--		2.61	--	.21	--	--	--	--	4	
								.44	.47	.16			.89		.7						
09/16/69	5050	2.89	8.8	64	F	7.9	283	27	16	11	--	0.0	153	--	7.5	--	--	--	--	136	
0630	5050		8.3	18	C	7.4	275	1.35	1.37	.48	--		2.51	--	.21	--	--	--	--	11	
								.47	.48	.16			.88		.7						
F9 1500.00 RUSSIAN RIVER NEAR HEALDSBURG																					
04/24/69	5050	3.10	10.5	57	F	8.2	235	22	13	6.6	0.9	0.0	122	12	3.6	1.4	--	0.9	--	129	108
1100	5050		10.2	14	C	7.8	210	1.10	1.07	.29	.02		2.00	.25	.10	.02	--	--	--	120	8
								.44	.43	.12	.1		.84	.11	.4	.1					
09/15/69	5050	1.18	8.8	70	F	8.1	244	28	12	7.4	--	0.0	140	--	3.7	--	--	--	--	120	
1340	5050		10.0	21	C	7.6	225	1.40	1.00	.32	--		2.30		.10					5	
								.57	.40	.13			.94		.4						

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	LAB SAMPLER	G.m. Q	DU SAT	TEMP	PH LAB FLD	EC LAB FLD	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER TDS TH				
							CA	MG	NA	K	CO3	HC03	SO4	CL	NO3	F	B	SI02	SUM	TH NCH	
		F9 1765.00		RUSSIAN RIVER NEAR HOPLAND																	
04/23/69	5050	6.69	10.4	55	F	8.3	182	18	9.0	7.2	0.7	0.0	97	8.7	3.6	0.1	--	1.3	--	108	82
1550	5050		98	13	C	7.4	190	.90	.74	.31	.02		1.59	.18	.10					96	3
								.96	.38	.16	1		.85	.10	.5						
09/15/69	5050	5.74	8.5	64	F	7.9	178	21	7.1	5.9	--	0.0	100	--	2.7	--	--	--	--	--	82
0915	5050		90	18	C	7.2	175	1.05	.59	.26			1.64		.08						0
								.58	.33	.14			.92		.4						
		F9 4900.00		RUSSIAN RIVER, E.F., AT POTTER VALLEY POWERHOUSE																	
04/24/69	5050	3.40	11.2	51	F	8.1	132	16	5.4	4.6	0.8	0.0	71	5.9	2.4	0.4	--	1.2	--	92	62
0830	5050		101	11	C	7.5	130	.80	.44	.20	.02		1.16	.12	.07	.01				71	4
								.55	.30	.14	1		.85	.9	.5	.1					
09/15/69	5050	3.50	8.5	66	F	8.0	151	20	4.8	4.2	--	0.0	81	--	2.3	--	--	--	--	--	70
1040	5050		92	19	C	7.4	140	1.00	.40	.18			1.33		.06						4
								.66	.26	.11			.88		.3						

TABLE D-3

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Abbreviations and column headings used in the following table include:

Turbidity - The values are shown in Hellige turbidity units unless otherwise indicated.

MBAS - Methylene blue active substances are a measure of detergents ABS and LAS.

Mg/L - Milligrams per liter.

Ug/L - Micrograms per liter.

Ft. - Feet.

TABLE D-3
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
CENTRAL COASTAL AREA

Station Number	Station	Date	Turbidity Units	Other Constituents
D0 1180.01	SAN LORENZO RIVER AT PARADISE PARK	9-26-69	3	
D0 1200.00	SAN LORENZO RIVER AT BIG TREES	11-07-68	6	
		1-08-69	3	
		3-12-69	45	Secchi Disk 1.1 Ft.
		5-01-69		Secchi Disk >1.2 Ft.
		7-02-69	9	
		9-26-69	2	
D0 3100.00	SOQUEL CREEK AT SOQUEL	4-29-69		Secchi Disk >1.5 Ft.
		9-26-69	3	
D1 1250.00	PAJARO RIVER AT CHITTENDEN	5-14-69		Aluminum 0.00 Mg/L
				Arsenic 0.00 Mg/L
				Copper 0.01 Mg/L
				Iron 1.1 Mg/L
				Manganese 0.03 Mg/L
				Lead 0.00 Mg/L
				Zinc 0.00 Mg/L
		9-04-69		Aluminum <3.3 Ug/L
				Beryllium <1.3 Ug/L
				Bismuth <0.7 Ug/L
				Cadmium <3.3 Ug/L
				Chromium <3.3 Ug/L
				Cobalt <3.3 Ug/L
				Copper <3.3 Ug/L
				Gallium <13 Ug/L
				Germanium <0.7 Ug/L
				Iron 8.0 Ug/L
				Lead <3.3 Ug/L
				Manganese <3.3 Ug/L
				Molybdenum <0.7 Ug/L
				Nickel <0.7 Ug/L
				Titanium <1.3 Ug/L
				Vanadium 5.3 Ug/L
				Zinc <13 Ug/L
D2 1220.00	SALINAS RIVER NEAR SPRECKELS	5-14-69		Aluminum 0.00 Mg/L
				Arsenic 0.00 Mg/L
				Copper 0.00 Mg/L
				Iron 4.1 Mg/L
				Lead 0.00 Mg/L
				Manganese 0.00 Mg/L
				Zinc 0.00 Mg/L
D2 1325.10	SALINAS RIVER NEAR GONZALES	5-14-69		Aluminum 0.00 Mg/L
				Arsenic 0.00 Mg/L
				Copper 0.00 Mg/L
				Iron 2.9 Mg/L
				Lead 0.00 Mg/L
				Manganese 0.01 Mg/L
				Zinc 0.00 Mg/L
		9-03-69		Aluminum <3.3 Ug/L
				Beryllium <1.3 Ug/L
				Bismuth <0.7 Ug/L
				Cadmium <3.3 Ug/L
				Chromium <3.3 Ug/L
				Cobalt <3.3 Ug/L
				Copper <3.3 Ug/L
				Gallium <13 Ug/L
				Germanium <0.7 Ug/L
				Iron 4.3 Ug/L
				Lead <3.3 Ug/L
				Manganese <3.3 Ug/L
				Molybdenum <0.7 Ug/L
				Nickel <0.7 Ug/L
				Titanium <1.3 Ug/L
				Vanadium 1.6 Ug/L
				Zinc <13 Ug/L
D2 1475.00	ARROYO SECO NEAR GREENFIELD	9-02-69		Aluminum <3.3 Ug/L
				Beryllium <1.3 Ug/L
				Bismuth <0.7 Ug/L
				Cadmium <3.3 Ug/L
				Chromium <3.3 Ug/L
				Cobalt <3.3 Ug/L
				Copper <3.3 Ug/L
				Gallium <13 Ug/L
				Germanium <0.7 Ug/L
				Iron 8.0 Ug/L
				Manganese <3.3 Ug/L
				Molybdenum <0.7 Ug/L
				Nickel <0.7 Ug/L
				Titanium <1.3 Ug/L
				Vanadium 1.6 Ug/L
				Zinc <13 Ug/L

TABLE D-3
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
CENTRAL COASTAL AREA

Station Number	Station	Date	Turbidity Units	Other Constituents
D2 1850.00	SALINAS RIVER NEAR BRADLEY	9-02-69		Aluminum <3.3 Ug/L Beryllium <1.3 Ug/L Bismuth <0.7 Ug/L Cadmium <3.3 Ug/L Chromium <3.3 Ug/L Cobalt <3.3 Ug/L Copper <3.3 Ug/L Gallium <13 Ug/L Germanium <0.7 Ug/L Iron 6.7 Ug/L Lead <3.3 Ug/L Manganese <3.3 Ug/L Molybdenum <0.7 Ug/L Nickel <0.7 Ug/L Titanium <1.3 Ug/L Vanadium 1.7 Ug/L Zinc <13 Ug/L
D4 1200.00	CARMEL RIVER AT ROBLES DEL RIO	1-15-69		Iron 0.73 Mg/L Manganese 0.00 Mg/L
EO B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	9-16-69	7	Suspended Solids 9 Mg/L
EO B 736.2 211.6	SAN FRANCISCO BAY AT SAN MATEO BRIDGE	10-15-68		Suspended Solids 17 Mg/L
		12-09-68		Secchi Disk 5.3 Ft.
		2-05-69		Suspended Solids 16 Mg/L Secchi Disk 3.0 Ft.
		4-07-69		Suspended Solids 24 Mg/L Secchi Disk 1.6 Ft.
		6-04-69		Suspended Solids 65 Mg/L Secchi Disk 1.0 Ft.
		8-13-69		Suspended Solids 26 Mg/L Secchi Disk 2.6 Ft.
EO B 748.1 222.4	SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND	9-16-69	8	Suspended Solids 20 Mg/L Secchi Disk 2.8 Ft.
EO B 748.4 228.2	SAN FRANCISCO BAY AT FORT POINT	10-14-68		Suspended Solids 6 Mg/L
		12-10-68		Secchi Disk 24 Mg/L Suspended Solids 4.2 Ft.
		2-06-69		Secchi Disk 14 Mg/L Suspended Solids 2.5 Ft.
		4-08-69		Suspended Solids 9.2 Mg/L Secchi Disk 4.3 Ft.
		6-03-69		Suspended Solids 16 Mg/L Secchi Disk 2.3 Ft.
		8-12-69		Suspended Solids 24 Mg/L Secchi Disk 6.9 Ft.
EO B 748.9 228.6	SAN FRANCISCO BAY AT GOLDEN GATE BRIDGE	9-15-69		Suspended Solids 23 Mg/L MBAS 4 Mg/L 0.0 Mg/L
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND	10-14-68		Secchi Disk 4.6 Ft.
		12-09-68		Suspended Solids 17 Mg/L Secchi Disk 3.7 Ft.
		2-05-69		Suspended Solids 7 Mg/L Secchi Disk 2.4 Ft.
		4-07-69		Suspended Solids 12 Mg/L Secchi Disk 2.0 Ft.
		6-04-69		Suspended Solids 19 Mg/L Secchi Disk 4.0 Ft.
		8-13-69		Suspended Solids 16 Mg/L Secchi Disk 6.0 Ft.
EO B 757.7 225.6	SAN PABLO BAY AT POINT SAN PABLO	10-15-68		Suspended Solids 26 Mg/L Secchi Disk 4.1 Ft.
		12-10-68		Suspended Solids 16 Mg/L Secchi Disk 1.4 Ft.
		2-06-69		Suspended Solids 88 Mg/L Secchi Disk 1.2 Ft.
		4-08-69		Suspended Solids 40 Mg/L Secchi Disk 0.9 Ft.
		6-03-69		Suspended Solids 58 Mg/L Secchi Disk 0.6 Ft.
		8-12-69		Suspended Solids 137 Mg/L Secchi Disk 2.0 Ft.
EO B 757.7 226.2	SAN PABLO STRAIT WEST OF THE BROTHERS	9-16-69	4	Suspended Solids 9 Mg/L
EO B 802.3 207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ	10-30-68	5*	Secchi Disk 2.2 Ft.
		11-25-68	20*	Secchi Disk 1.2 Ft.

*Hach turbidity units.

TABLE D-3
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
CENTRAL COASTAL AREA

Station Number	Station	Date	Turbidity Units	Other Constituents		
EO B 802.3 207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ (Continued)	12-18-68	15*	Secchi Disk 1.0 Ft. Cadmium 0.01 Mg/L Chromium <0.05 Mg/L Copper <0.5 Mg/L Iron 0.2 Mg/L Lead <0.02 Mg/L Manganese 0.06 Mg/L Zinc <0.5 Mg/L		
		1-28-69	80*	Secchi Disk 0.5 Ft.		
		2-26-69	65*	Secchi Disk 0.7 Ft.		
		3-27-69	10*	Secchi Disk 1.3 Ft. Cadmium <0.01 Mg/L Chromium <0.05 Mg/L Copper 0.1 Mg/L Iron 0.2 Mg/L Lead <0.01 Mg/L Manganese <0.05 Mg/L Zinc <0.1 Mg/L		
		5-08-69	65*	Secchi Disk 0.7 Ft.		
		6-11-69	50*	Secchi Disk 1.0 Ft. Cadmium <0.01 Mg/L Chromium <0.01 Mg/L Copper 0.1 Mg/L Iron 0.1 Mg/L Lead <0.01 Mg/L Manganese <0.05 Mg/L Zinc <0.1 Mg/L		
		7-23-69	13*	Secchi Disk 2.0 Ft.		
		8-20-69	28*	Secchi Disk 0.8 Ft.		
		9-18-69	32*	Secchi Disk 1.0 Ft. Cadmium <0.01 Mg/L Chromium <0.01 Mg/L Copper <0.1 Mg/L Iron <0.1 Mg/L Lead <0.01 Mg/L Manganese <0.05 Mg/L Zinc <0.1 Mg/L		
		EO B 802.4 208.2	SUISUN BAY AT BENICIA (END OF PIER)	10-14-68		Secchi Disk 2.2 Ft. Suspended Solids 21 Mg/L
				12-10-68		Secchi Disk 1.6 Ft. Suspended Solids 20 Mg/L
				2-06-69		Secchi Disk 0.3 Ft. Suspended Solids 311 Mg/L
				EO B 802.5 208.1	SUISUN BAY AT BENICIA (MIDDLE OF PIER)	4-08-69
		6-06-69				Secchi Disk 0.3 Ft. Suspended Solids 480 Mg/L
		8-12-69				Secchi Disk 0.6 Ft. Suspended Solids 216 Mg/L
		EO B 802.8 155.0	SACRAMENTO RIVER AT CHIPPS ISLAND	10-18-68	25*	Secchi Disk 0.8 Ft.
				10-30-68	55*	Secchi Disk 0.8 Ft.
11-25-68	35*			Secchi Disk 0.7 Ft.		
12-12-68	6*			Secchi Disk 0.7 Ft.		
12-18-68	25*			Secchi Disk 0.8 Ft. Cadmium <0.01 Mg/L Chromium <0.05 Mg/L Copper <0.5 Mg/L Iron 0.2 Mg/L Lead <0.02 Mg/L Manganese 0.07 Mg/L Zinc <0.5 Mg/L		
1-28-69	160*			Secchi Disk 0.4 Ft.		
2-26-69	80*			Secchi Disk 0.8 Ft.		
3-27-69	20*			Secchi Disk 1.1 Ft. Cadmium <0.01 Mg/L Chromium <0.05 Mg/L Copper <0.1 Mg/L Iron 0.2 Mg/L Lead <0.01 Mg/L Manganese <0.05 Mg/L Zinc <0.1 Mg/L		
5-08-69	36*			Secchi Disk 1.0 Ft.		
6-11-69	37*			Secchi Disk 0.9 Ft. Cadmium <0.01 Mg/L Chromium <0.01 Mg/L Copper <0.1 Mg/L Iron 0.2 Mg/L Lead <0.01 Mg/L Manganese <0.05 Mg/L Zinc <0.1 Mg/L		
7-23-69	50*			Secchi Disk 0.75 Ft.		
8-20-69	40*			Secchi Disk 0.8 Ft.		

*Hach turbidity units.

TABLE D-3
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
CENTRAL COASTAL AREA

Station Number	Station	Date	Turbidity Units	Other Constituents	
EO B 802.8 155.0	SACRAMENTO RIVER AT CHIPPS ISLAND (Continued)	9-18-69	35*	Secchi Disk	0.8 Ft.
				Cadmium	<0.01 Mg/L
				Chromium	<0.01 Mg/L
				Copper	<0.1 Mg/L
				Iron	<0.1 Mg/L
				Lead	<0.01 Mg/L
				Manganese	<0.05 Mg/L
				Zinc	<0.1 Mg/L
EO B 803.2 204.8	SUISUN BAY ABOVE AVON PIER	10-30-68	15*	Secchi Disk	1.7 Ft.
		11-25-68	14*	Secchi Disk	1.1 Ft.
		12-18-68	15*	Secchi Disk	1.0 Ft.
		1-28-69	90*	Secchi Disk	0.5 Ft.
		2-26-69	55*	Secchi Disk	0.7 Ft.
		3-27-69	15*	Secchi Disk	1.2 Ft.
		5-08-69	70*	Secchi Disk	0.7 Ft.
		6-10-69	50*	Secchi Disk	0.8 Ft.
		7-22-69	27*	Secchi Disk	1.7 Ft.
		8-19-69	30*	Secchi Disk	1.0 Ft.
		9-17-69	65*	Secchi Disk	0.7 Ft.
EO B 803.6 159.3	SUISUN BAY OFF MIDDLE POINT NEAR NICHOLS	10-30-68	30*	Secchi Disk	0.9 Ft.
		11-25-68	20*	Secchi Disk	1.0 Ft.
		12-18-68	15*	Secchi Disk	0.9 Ft.
		1-28-69	90*	Secchi Disk	0.4 Ft.
		2-26-69	60*	Secchi Disk	0.8 Ft.
		3-27-69	15*	Secchi Disk	1.5 Ft.
		5-08-69	39*	Secchi Disk	0.9 Ft.
		6-10-69	32*	Secchi Disk	1.2 Ft.
		7-22-69	55*	Secchi Disk	0.7 Ft.
		8-20-69	50*	Secchi Disk	0.75 Ft.
		9-18-69	39*	Secchi Disk	0.75 Ft.
EO B 804.0 203.0	SUISUN BAY NEAR PRESTON POINT	10-30-68	20*	Secchi Disk	1.3 Ft.
		11-25-68	50*	Secchi Disk	1.0 Ft.
		12-18-68	15*	Secchi Disk	1.1 Ft.
		1-28-69	100*	Secchi Disk	0.4 Ft.
		2-26-69	60*	Secchi Disk	0.7 Ft.
		3-27-69	15*	Secchi Disk	1.2 Ft.
		5-08-69	55*	Secchi Disk	0.7 Ft.
		6-10-69	40*	Secchi Disk	0.9 Ft.
		7-22-69	70*	Secchi Disk	0.7 Ft.
		8-19-69	70*	Secchi Disk	0.6 Ft.
		9-17-69	50*	Secchi Disk	0.75 Ft.
EO B 804.4 156.2	HONKER BAY NEAR WHEELER POINT	10-28-68	65*	Secchi Disk	0.5 Ft.
		11-26-68	60*	Secchi Disk	0.7 Ft.
		12-17-68	6*	Secchi Disk	0.7 Ft.
		1-29-69	240*	Secchi Disk	0.35 Ft.
		2-27-69	70*	Secchi Disk	0.7 Ft.
		3-27-69	20*	Secchi Disk	0.9 Ft.
		5-07-69	55*	Secchi Disk	0.75 Ft.
		6-10-69	40*	Secchi Disk	1.0 Ft.
				Cadmium	<0.01 Mg/L
				Chromium	<0.01 Mg/L
				Copper	<0.1 Mg/L
		Iron	0.3 Mg/L		
		Lead	<0.01 Mg/L		
		Manganese	<0.05 Mg/L		
		Zinc	<0.1 Mg/L		
	7-22-69	80*	Secchi Disk	0.4 Ft.	
	8-19-69	77*	Secchi Disk	0.6 Ft.	
	9-17-69	50*	Secchi Disk	0.75 Ft.	
EO B 807.0 202.3	GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH	10-28-68	75*	Secchi Disk	0.4 Ft.
		11-26-68	45*	Secchi Disk	0.8 Ft.
				Suspended Solids	74 Mg/L
				Volatile Suspended Solids	10 Mg/L
		12-17-68	10*	Secchi Disk	0.8 Ft.
		1-29-69	90*	Secchi Disk	0.45 Ft.
		2-27-69	70*	Secchi Disk	0.6 Ft.
		3-27-69	20*	Secchi Disk	1.1 Ft.
		5-07-69	85*	Secchi Disk	0.75 Ft.
		6-11-69	65*	Secchi Disk	0.8 Ft.
		7-23-69	140*	Secchi Disk	0.4 Ft.
		8-20-69	60*	Secchi Disk	0.5 Ft.
		9-18-69	70*	Secchi Disk	0.6 Ft.

*Hach turbidity units.

TABLE D-3
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
CENTRAL COASTAL AREA

Station Number	Station	Date	Turbidity Units	Other Constituents
EO S 809.2 205.3	CORDELIA SLOUGH AT CYGNUS	10-01-68	120*	
		10-09-68	80*	
		10-16-68	45*	
		10-31-68	60*	
		11-15-68	140*	
		12-16-68	65*	Secchi Disk 0.5 Ft.
		1-27-69	200*	Secchi Disk 0.3 Ft.
		2-12-69	75*	Secchi Disk 0.5 Ft.
		3-14-69	95*	Secchi Disk 0.4 Ft.
		4-11-69	60*	Secchi Disk 0.4 Ft.
		5-12-69	125*	Secchi Disk 0.3 Ft.
		6-12-69	120*	Secchi Disk 0.3 Ft.
		7-08-69	110*	Secchi Disk 0.3 Ft.
		8-05-69	110*	Secchi Disk 0.6 Ft.
9-03-69	65*	Secchi Disk 0.6 Ft.		
EO S 810.8 202.8	SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND	10-16-68	29*	
		10-22-68	45*	
		10-30-68	35*	
		11-14-68	25*	
		12-16-68	55*	Secchi Disk 0.6 Ft.
		3-14-69	100*	Secchi Disk 0.6 Ft.
		4-24-69	150*	Secchi Disk 0.3 Ft.
		5-12-69	120*	Secchi Disk 0.3 Ft.
		6-12-69	95*	Secchi Disk 0.4 Ft.
		8-05-69	150*	Secchi Disk 0.6 Ft.
		9-03-69	65*	Secchi Disk 0.7 Ft.
EO S 811.0 204.8	CHADBOURNE SLOUGH AT CHADBOURNE ROAD	10-01-68	30*	
		10-09-68	15*	
		10-16-68	20*	
		10-31-68	40*	
		11-15-68	50*	
		12-16-68	50*	Secchi Disk 0.6 Ft.
		1-27-69	75*	Secchi Disk 0.4 Ft.
		2-12-69	125*	Secchi Disk 0.4 Ft.
		3-14-69	90*	Secchi Disk 0.5 Ft.
		4-11-69	55*	Secchi Disk 0.5 Ft.
		5-12-69	100*	Secchi Disk 0.3 Ft.
		6-12-69	130*	Secchi Disk 0.3 Ft.
		7-08-69	110*	Secchi Disk 0.5 Ft.
		8-05-69	120*	Secchi Disk 0.5 Ft.
9-03-69	60*	Secchi Disk 0.7 Ft.		
EO S 811.2 158.5	MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD	10-01-68	25*	
		10-16-68	15*	
		10-31-68	50*	
		11-15-68	25*	
		12-16-68	45*	Secchi Disk 0.6 Ft.
		1-27-69	200*	Secchi Disk 0.6 Ft.
		2-12-69	80*	Secchi Disk 0.5 Ft.
		3-14-69	75*	Secchi Disk 0.7 Ft.
		4-11-69	40*	Secchi Disk 0.8 Ft.
		5-12-69	110*	Secchi Disk 0.4 Ft.
		6-12-69	80*	Secchi Disk 0.5 Ft.
		7-08-69	130*	Secchi Disk 0.4 Ft.
		8-05-69	100*	Secchi Disk 0.7 Ft.
		9-03-69	55*	Secchi Disk 0.7 Ft.
EO S 811.5 207.2	CORDELIA SLOUGH AT UPPER END NEAR CORDELIA	10-01-68	10*	
		10-16-68	4*	
		10-31-68	25*	
		4-11-69	40*	Secchi Disk 0.5 Ft.
		5-12-69	38*	Secchi Disk 0.3 Ft.
		6-12-69	50*	Secchi Disk 0.5 Ft.
		7-08-69	80*	Secchi Disk 0.3 Ft.
		8-05-69	140*	Secchi Disk 0.4 Ft.
		9-03-69	75*	Secchi Disk 0.6 Ft.
		EO S 813.6 201.2	HILL SLOUGH AT GRIZZLY ISLAND ROAD	10-01-68
10-16-68	22*			
10-22-68	50*			
10-30-68	45*			
11-15-68	75*			
12-16-68	50*			Secchi Disk 0.6 Ft.
1-27-69	130*			Secchi Disk 0.6 Ft.
2-12-69	100*			Secchi Disk 0.4 Ft.
3-14-69	70*			Secchi Disk 0.6 Ft.
4-11-69	35*			Secchi Disk 0.7 Ft.
5-12-69	200*			Secchi Disk 0.4 Ft.
6-12-69	100*			Secchi Disk 0.4 Ft.
7-08-69	100*			Secchi Disk 0.6 Ft.
8-05-69	150*			Secchi Disk 0.4 Ft.
9-03-69	85*	Secchi Disk 0.4 Ft.		

*Each turbidity units.

TABLE D-3
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER
CENTRAL COASTAL AREA

Station Number	Station	Date	Turbidity Units	Other Constituents
E1 O 749.4 233.2	PACIFIC OCEAN AT POTATO PATCH SHOAL NEAR POINT BONITA	9-15-69		Suspended Solids 0 Mg/L MBAS 0.0 Mg/L
E3 1100.50	NAPA RIVER AT DUTTON LANDING	10-15-68		Secchi Disk 3.4 Ft.
		12-09-68		Suspended Solids 8 Mg/L Secchi Disk 3.1 Ft.
		2-05-69		Suspended Solids 13 Mg/L Secchi Disk 0.7 Ft.
		4-07-69		Suspended Solids 76 Mg/L Secchi Disk 1.0 Ft.
		6-04-69		Suspended Solids 45 Mg/L Secchi Disk 0.7 Ft.
		8-13-69		Suspended Solids 82 Mg/L Secchi Disk 1.3 Ft. Suspended Solids 43 Mg/L
E3 1500.00	NAPA RIVER NEAR ST. HELENA	4-23-69		Secchi Disk 0.9 Ft.
		9-15-69	10	
E5 1150.00	ALAMEDA CREEK NEAR NILES	10-16-68	20	
		11-07-68	30	Secchi Disk 1.1 Ft.
		12-10-68	10	Secchi Disk >1.5 Ft.
		1-08-69	25	
		2-06-69	6600	Secchi Disk 0.1 Ft.
		3-12-69	92	Secchi Disk 0.6 Ft.
		4-08-69		Secchi Disk 2.7 Ft.
		5-01-69		Secchi Disk >1.7 Ft.
		6-04-69	45	Secchi Disk 1.2 Ft.
		8-13-69	45	
E5 1400.00	ARROYO DEL VALLE NEAR LIVERMORE	4-25-69		Secchi Disk 2.2 Ft.
E6 4250.00	COYOTE CREEK NEAR MADRONE	4-28-69		Secchi Disk 1.4 Ft.
E6 5250.00	LOS GATOS CREEK AT LOS GATOS	5-01-69		Secchi Disk >1 Ft.
		9-26-69	3	
E8 O 744.4 231.2	PACIFIC OCEAN OFF OCEAN AVENUE AT SAN FRANCISCO	1-15-69		Suspended Solids 0 Mg/L MBAS 0.00 Mg/L
E8 4302.01	CORINDA LOS TRANCOS CREEK NEAR HALF MOON BAY	3-07-69		Iron (Dissolved) 0.02 Mg/L
F8 2100.00	NAVARRO RIVER NEAR NAVARRO	11-19-68	3	
		1-23-69	500	
		3-05-69	95	
		5-15-69	3	
		7-17-69	3	
		9-11-69	5	
F8 2720.00	BIG RIVER NEAR MOUTH	11-19-68	7	
		1-23-69	340	
		3-05-69	45	
		5-15-69	3	
		7-17-69	2	
		9-11-69	4	
F8 3200.00 (F8 3080.50)	NOYO RIVER NEAR FORT BRAGG	11-20-68	4	
		1-23-69	230	
		3-05-69	35	
		5-15-69	2	
		7-16-69	2	
		9-11-69	15	
F9 1080.50	RUSSIAN RIVER AT GUERNEVILLE	11-06-68	6	
		1-07-69	25	
		3-13-69	70	Secchi Disk 0.9 Ft.
		4-24-69		Secchi Disk 0.8 Ft.
		7-03-69	15	
		9-16-69	35	
F9 1500.00	RUSSIAN RIVER NEAR HEALDSBURG	4-24-69		Secchi Disk 0.6 Ft.
		9-15-69	8	
F9 1765.00	RUSSIAN RIVER NEAR HOPLAND	4-23-69		Secchi Disk 1.4 Ft.
		9-15-69	4	
F9 4900.00	RUSSIAN RIVER, EAST FORK, AT POTTER VALLEY POWERHOUSE	4-24-69		Secchi Disk 1.0 Ft.
		9-15-69	15	

TABLE D-4
SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

(Chlorides in Milligrams Per Liter)

Station	Station Number	OCTOBER 1968							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133	13,200 e	12,500		11,700		13,200	13,000	11,400 a
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	11,100	7,850	6,290	10,400	9,680	9,550	11,700	8,520
SUISUN BAY AT PORT CHICAGO	EOB80342023	8,080	5,880	8,100	7,570		7,520 af		6,720
SUISUN BAY AT NICHOLS	EOB80301590	6,960	6,470	7,540	7,080	6,540		7,960	
SACRAMENTO RIVER AT PITTSBURG	B9D80231530		1,160	1,640		6,850	1,430 a	1,460	1,460
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513	1,450 a	1,280	2,030 d	1,630 a		1,960	1,150 a	1,810
Station	Station Number	NOVEMBER 1968							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133	12,700	11,600	10,400	10,200	12,100	11,900	9,740	
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	8,500 a	8,300	7,910	8,720	10,100 a	6,810 a	6,350 a	10,900 a
SUISUN BAY AT PORT CHICAGO	EOB80342023	6,290		5,420		6,880	6,690	4,440 a	
SUISUN BAY AT NICHOLS	EOB80301590	6,880	4,800	6,490		6,490	6,180		4,860
SACRAMENTO RIVER AT PITTSBURG	B9D80231530	1,290		1,020		942	874		496
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513	1,470	1,410	825 a		1,120	449 a	532	669 d
Station	Station Number	DECEMBER 1968							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133		10,600	11,000 ad	10,000 d		7,540	8,910	6,470
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	6,490 a	7,130 a	8,540 a	5,220 a	3,930 a	3,200 a	3,000	2,830 a
SUISUN BAY AT PORT CHICAGO	EOB80342023		3,960 ab			3,340	2,490		93 ab
SUISUN BAY AT NICHOLS	EOB80301590	4,710	5,860	7,230	5,150		894	1,150	
SACRAMENTO RIVER AT PITTSBURG	B9D80231530			1,260 ad		277 d	79	114	
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513			340 a	68	113	14 a		16
Station	Station Number	JANUARY 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133		6,840	7,080	7,180	4,050		119	112
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	1,700 a		5,440	6,910	1,940	34 d	16	20
SUISUN BAY AT PORT CHICAGO	EOB80342023			2,500		51 a	33	17 e	
SUISUN BAY AT NICHOLS	EOB80301500	527	954		3,940	59	20	10	
SACRAMENTO RIVER AT PITTSBURG	B9D80231530				148	28		24	
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513		13 a	15		10 a	10	6	9

*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

b Taken on following day.

c Taken two days later.

d Taken over one hour off schedule time.

e Taken on preceding day.

f Taken two days earlier.

TABLE D-4
SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

(Chlorides in Milligrams Per Liter)

Station	Station Number	FEBRUARY 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133	87	1,980	1,320	1,420	38		195	
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	27	17 a	1,120	732	24	23	18	
SUISUN BAY AT PORT CHICAGO	EOB80342023	27	27 a	27	28	25	26		
SUISUN BAY AT NICHOLS	EOB80301590	34	20	21		17	24		
SACRAMENTO RIVER AT PITTSBURG	B9D80231530	20		23	27	25	29	28 bd	
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513	8	9	14	12	10	10	13	
Station	Station Number	MARCH 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133	586		1,970	4,380			4,100	5,570
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	25	21 a		957	233 a	1,370	1,020	2,700
SUISUN BAY AT PORT CHICAGO	EOB80342023	31	24	23		34	31	32	37
SUISUN BAY AT NICHOLS	EOB80301590		24	22	22	27		26	
SACRAMENTO RIVER AT PITTSBURG	B9D80231530		27 ab	25	23	29 d	29	31	26
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513		12	11	27	18	17	19	40
Station	Station Number	APRIL 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133		3,520		2,920 b	3,450		3,600 b	5,680
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	860 ab	1,560	465	340 ab	222 a	1,840 a	3,350 b	2,880 a
SUISUN BAY AT PORT CHICAGO	EOB80342023	38 b	22 a	25	23 b	23	71	1,380 b	1,010
SUISUN BAY AT NICHOLS	EOB80301590		33	17	19 b		15	16 b	80
SACRAMENTO RIVER AT PITTSBURG	B9D80231530	26 bc		21	20 b	20		17 bd	
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513	16 ab	14 a	10	13 ab	11	12		11
Station	Station Number	MAY 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	EOB80352133	4,780 e	4,350	5,320 b	4,750 b	3,820			
CARQUINEZ STRAIT AT MARTINEZ	EOB80192078	3,460 e	3,400	2,780 a	912 b	1,750	575	712 ab	495 a
SUISUN BAY AT PORT CHICAGO	EOB80342023	600 e	506	637 b	26 a	26	16	19 ab	24
SUISUN BAY AT NICHOLS	EOB80301590		448	130 b	22 b	15	14	11 b	14 b
SACRAMENTO RIVER AT PITTSBURG	B9D80231530	17 b	18	19 a	20 a	19	14 cd		
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513		10	11 a		10 a	10	16 ab	10 a

*Sample taken at four-day intervals approximately one and one-half hours after high tide.

a Taken after low high tide.

d Taken over one hour off schedule time.

b Taken on following day.

e Taken on preceding day.

c Taken two days later.

f Taken two days earlier.

TABLE D-4
SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

(Chlorides in Milligrams Per Liter)

Station	Station Number	JUNE 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	E0B80352133		4,150	4,620	3,400	2,520	3,480 e		6,720
CARQUINEZ STRAIT AT MARTINEZ	E0B80192078	900	1,700	545 g	18 g				
SUISUN BAY AT PORT CHICAGO	E0B80342023	226	28 eg		106	23	1,440 e	2,200	2,880
SUISUN BAY AT NICHOLS	E0B80301590	20	15						
SACRAMENTO RIVER AT PITTSBURG	B9D80231530		13 bd		13 g	14 g	13 g		20 g
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513	8 g	8 g	8 g	10 g	10 g			
Station	Station Number	JULY 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	E0B80352133			8,420 ad		9,110	9,360 e	11,300	12,000
CARQUINEZ STRAIT AT MARTINEZ	E0B80192078		2,440 a	3,860 a	6,300	887 a	7,820 e	7,360 cd	9,060
SUISUN BAY AT PORT CHICAGO	E0B80342023		3,400 d		3,230	2,680	4,040 e		
SUISUN BAY AT NICHOLS	E0B80301590					73 a	114 a	241 a	
SACRAMENTO RIVER AT PITTSBURG	B9D80231530								
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513								
Station	Station Number	AUGUST 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	E0B80352133	11,600	10,500 e	11,500	10,300	10,800		10,400	11,100
CARQUINEZ STRAIT AT MARTINEZ	E0B80192078	5,920 a	8,000 e	6,850 a	6,580 a	6,280 e	6,320 bd	5,100 ad	6,020 a
SUISUN BAY AT PORT CHICAGO	E0B80342023	3,860		5,560	5,500	4,580	4,000 e	4,800	3,050 bd
SUISUN BAY AT NICHOLS	E0B80301590								
SACRAMENTO RIVER AT PITTSBURG	B9D80231530	360 a	272 a	341 e		374 a		291 e	207 a
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513						75 e	49 a	48 a
Station	Station Number	SEPTEMBER 1969							
		2	6	10	14	18	22	26	30
CARQUINEZ STRAIT AT CROCKETT	E0B80352133	10,600 d	8,950 e	9,700	10,000	7,700 d	7,000 e	8,650	
CARQUINEZ STRAIT AT MARTINEZ	E0B80192078	4,380 a	5,050 e	4,350 a	4,600 a	5,600	4,780 a	2,820	6,550
SUISUN BAY AT PORT CHICAGO	E0B80342023	3,000		3,600	2,500	406			1,560
SUISUN BAY AT NICHOLS	E0B80301590								
SACRAMENTO RIVER AT PITTSBURG	B9D80231530	145 a	91 a	56 a	44 a	70 a	30 a	31	44 ad
SACRAMENTO RIVER AT COLLINSVILLE	B9D80441513	73	21 a		18	25	16 a		21

*Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

b Taken on following day.

c Taken two days later.

d Taken over one hour off schedule time.

e Taken on preceding day.

f Taken two days earlier.

g Taken after low low tide.

TABLE D-5

NUTRIENTS IN SURFACE WATER

Abbreviations and Chemical Codes

NITRATE SERIES

- NO₃ - Nitrate (unfiltered)
- NO₂ - Nitrite (unfiltered)
- ORG - Organic Nitrogen (unfiltered)
- NH₄ - Ammonium (unfiltered)
- TOTAL - Total Nitrogen (unfiltered)
- N - Nitrogen (unfiltered)

PHOSPHATE SERIES

- ORTHO - Ortho-Phosphate (filtered)
- HYDRO - Hydrolizable Phosphates (filtered)
- TOTAL - Total and Organic Phosphates (unfiltered)

MISCELLANEOUS NUTRIENTS

- FTP - Filtered Total Phosphates as P
- PO₄ - Unfiltered Ortho-Phosphates as P
- PON - Particulate Organic Nitrogen as N
- DON - Dissolved Organic Nitrogen as N
- M - Milligrams per liter
- MY - Less than value indicated in milligrams per liter

SAMP

Codes for agency collecting sample

- 5001 - U. S. Bureau of Reclamation
- 5050 - Department of Water Resources

LAB

Codes for laboratory performing analysis

- 5006 - Laboratory at McClellan Air Force Base used by U. S. Bureau of Reclamation
- 5050 - Department of Water Resources Laboratory at Bryte

TABLE D-5
NUTRIENTS IN SURFACE WATER
CENTRAL COASTAL AREA

DATE TIME	NUTRIENTS (Mg/L)									MISCELLANEOUS NUTRIENTS												SAMP	LAB
	NITROGEN SERIES AS N					PHOSPHATE SERIES AS P				CODE	VALUE	UR	CODE	VALUE	UR	CODE	VALUE	UR	CODE	VALUE	UR		
	NO ₃	NO ₂	ORG	NH ₄	TOTAL	ORTHO	HYDRO	TOTAL															
DO 1200.00	SAN LORENZO RIVER AT BIG TREES																						
11-07-68 0800	0.25	0.00	0.3	0.04		0.20	0.04	0.26														5050	5050
01-08-69 0830	0.40	0.00	0.1	0.00		0.15	0.02	0.17														5050	5050
03-12-69 0700	0.19	0.00	0.1	0.00		0.07	0.00	0.33														5050	5050
05-01-69 0630	0.13	0.00	0.1	0.00		0.10	0.00	0.12														5050	5050
EO B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)																						
09-16-69 0950	0.37		0.0	0.01		0.36	0.00	0.46	FTP	00.38	M											5050	5050
12-15-69 1510	0.49		0.0	0.12		0.19	0.07	0.26														5050	5050
EO B 736.2 211.6	SAN FRANCISCO BAY AT SAN MATEO BRIDGE																						
10-15-68 0855	0.54	0.02	0.0	0.01		0.33	0.17	0.67														5050	5050
12-09-68 0935	0.70	0.02	0.8	0.07		0.27	0.16	0.60														5050	5050
02-05-69 0835	0.67	0.04	0.1	0.01		0.15	0.02	0.18														5050	5050
04-07-69 1020	0.28	0.01	0.0	0.00		0.13	0.04	0.29														5050	5050
06-04-69 1045	0.03	0.00	0.1	0.03		0.12	0.4	0.47														5050	5050
08-13-69 0930	0.46	0.01	0.3	0.04		0.29	0.29	0.65														5050	5050
EO B 748.1 222.4	SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND																						
09-16-69 1100	0.24		0.3	0.04		0.09	0.00	0.13	FTP	00.12	M											5050	5050
EO B 748.4 228.2	SAN FRANCISCO BAY AT FORT POINT																						
10-14-68 0945	0.22	0.01	0.0	0.05		0.12	0.09	0.25														5050	5050
12-10-68 0810	0.37	0.02	0.0	0.06		0.06	0.04	0.16														5050	5050
02-06-69 0735	0.25	0.01	0.1	0.00		0.03	0.01	0.04														5050	5050
04-08-69 0840	0.16	0.01	0.0	0.01		0.05	0.02	0.07														5050	5050
06-03-69 0720	0.33	0.01	0.1	0.00		0.06	0.03	0.22														5050	5050
08-12-69 0710	0.37	0.01	0.0	0.04		0.08	0.08	0.18														5050	5050
EO B 748.9 228.6	SAN FRANCISCO BAY AT GOLDEN GATE BRIDGE																						
09-15-69 1015	0.20		0.1	0.12		0.06	0.00	0.11	FTP	00.08	M											5050	5050
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND																						
10-14-68 1045	0.28	0.01	0.1	0.05		0.11	0.06	0.27														5050	5050
12-09-68 0820	0.40	0.02	0.3	0.04		0.09	0.04	0.19														5050	5050
02-05-69 0720	0.38	0.01	0.0	0.00		0.05	0.01	0.07														5050	5050
04-07-69 0840	0.26	0.01	0.0	0.00		0.07	0.00	0.07														5050	5050
06-04-69 0840	0.26	0.01	0.2	0.00		0.07	0.00	0.40														5050	5050
08-13-69 0810	0.39	0.01	0.0	0.00		0.11	0.15	0.27														5050	5050

TABLE D-5
NUTRIENTS IN SURFACE WATER
CENTRAL COASTAL AREA

DATE TIME	NUTRIENTS (Mg/L)								MISCELLANEOUS NUTRIENTS								SAMP	LAB				
	NITROGEN SERIES AS N					PHOSPHATE SERIES AS P			CODE	VALUE	UR	CODE	VALUE	UR	CODE	VALUE			UR	CODE	VALUE	UR
	NO ₃	NO ₂	ORG	NH ₄	TOTAL	ORTHO	HYDRO	TOTAL														
EO B 757.7	225.6	SAN PABLO BAY AT POINT SAN PABLO																				
10-15-68 1020	0.30	0.01	0.0	0.06		0.14	0.07	0.43												5050	5050	
12-10-68 0930	0.49	0.03	0.1	0.06		0.08	0.11	0.31												5050	5050	
02-06-69 0830	0.44	0.01	0.5	0.01		0.07	0.01	0.15												5050	5050	
04-08-69 1000	0.32	0.01	0.3	0.15		0.09	0.07	0.27												5050	5050	
03-03-69 0930	0.38	0.01	0.5	0.01		0.07	0.11	0.29												5050	5050	
08-12-69 0820	0.22	0.03	0.0	0.11		0.07	0.07	0.15												5050	5050	
EO B 757.7	226.2	SAN PABLO STRAIT WEST OF THE BROTHERS																				
09-16-69 1200	0.28		0.1	0.09		0.09	0.00	0.12	FTP	00.09	M									5050	5050	
EO B 802.3	207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ																				
10-30-68 1045	1.1		0.65	0.1				0.05	PO ₄	00.02	M									5001	5006	
11-25-68 0920	0.1		0.68	0.44				0.08	PO ₄	00.02	M									5001	5006	
12-18-68 1245	0.6		0.12	0.15				0.33	PO ₄	00.11	M									5001	5006	
01-28-69 1055	1.3		1.40	0.46				0.11	PO ₄	00.01	M									5001	5006	
02-26-69 0955	0.2		0.65	<0.08				0.08	PO ₄	00.05	M									5001	5006	
03-27-69 0930	0.4		0.58	<0.08				0.07	PO ₄	00.06	M	DON	00.54	M	PON	00.04	M			5001	5006	
05-08-69 0725	0.2		0.82	<0.08				0.09	PO ₄	00.07	M									5001	5006	
06-11-69 1445	<0.1		1.0	0.10				0.04	PO ₄	00.01	M									5001	5006	
07-23-69 1130	0.2		0.52	0.01				0.17	PO ₄	00.03	M	DON	00.46	M	PON	00.06	M			5001	5006	
08-20-69 1040	<0.05		0.56	<0.005				0.14	PO ₄	0.003	M	DON	00.21	M	PON	00.35	M			5001	5006	
09-18-69 0935	0.20		0.27	0.11				0.16	PO ₄	00.07	M	DON	00.27	M	PON	00.01	MY			5001	5006	
EO B 802.4	208.2	SUISUN BAY AT BENICIA (END OF PIER)																				
10-14-68 1300	0.25	0.01	0.3	0.08		0.07	0.11	0.20												5050	5050	
12-10-68 1100	0.50	0.04	0.8	0.08		0.08	0.04	0.27												5050	5050	
02-06-69 1015	0.68	0.00	0.7	0.00		0.09	0.10	0.31												5050	5050	
EO B 802.5	208.1	SUISUN BAY AT BENICIA (MIDDLE OF PIER)																				
04-08-69 1120	0.39	0.00	0.8	0.00		0.11	0.14	0.67												5050	5050	
06-06-69 1245	0.67	0.01	1.0	0.03		0.04	0.89	0.93												5050	5050	
08-12-69 0950	0.16	0.00	1.1	0.00		0.03	0.02	0.42												5050	5050	
EO B 802.8	155.0	SACRAMENTO RIVER AT CHIPPS ISLAND																				
10-30-68 1200	0.8		0.70	<0.08				0.04	PO ₄	00.02	M									5001	5006	
11-25-68 1020	<0.1		0.50	0.08				0.10	PO ₄	00.02	M									5001	5006	
12-18-68 1350	0.5		0.42	0.11				0.34	PO ₄	00.10	M									5001	5006	
01-28-69 1250	0.8		0.50	<0.08				0.10	PO ₄	00.01	M									5001	5006	
02-26-69 1145	<0.1		<0.08	<0.08				0.08	PO ₄	00.05	M									5001	5006	
03-27-69 1225	0.3		0.68	0.60				0.09	PO ₄	00.05	M	DON	00.59	M	PON	00.09	M			5001	5006	

TABLE D-5
NUTRIENTS IN SURFACE WATER
CENTRAL COASTAL AREA

DATE TIME	NUTRIENTS (Mg/L)								MISCELLANEOUS NUTRIENTS								SAMP	LAB									
	NITROGEN SERIES AS N				PHOSPHATE SERIES AS P				CODE	VALUE	UR	CODE	VALUE	UR	CODE	VALUE			UR	CODE	VALUE	UR					
	NO ₃	NO ₂	ORG	NH ₄	TOTAL	ORTHO	HYDRO	TOTAL																			
EO B 802.8	155.0	SACRAMENTO RIVER AT CHIPPS ISLAND (Continued)																									
05-08-69 0850	0.3		0.95	<0.08					0.08	PO ₄	00.05	M													5001	5006	
06-11-69 1605	<0.1		0.75	0.10					0.05	PO ₄	00.01	M													5001	5006	
07-23-69 1255	<0.05		0.51	0.01					0.22	PO ₄	00.03	M	DON	00.36	M	PON	00.15	M							5001	5006	
08-20-69 1235	<0.05		0.39	<0.005					0.16	PO ₄	00.05	M	DON	00.37	M	PON	00.02	M							5001	5006	
09-18-69 1120	0.07		0.22	0.11					0.14	PO ₄	00.07	M	DON	00.15	M	PON	00.07	M							5001	5006	
EO B 803.2	204.8	SUISUN BAY ABOVE AVON PIER																									
10-30-68 1110	1.0		0.65	<0.08					0.06	PO ₄	00.03	M													5001	5006	
11-25-68 0935	0.4		0.63	0.10					0.07	PO ₄	00.02	M													5001	5006	
12-18-68 1300	0.7		0.55	0.18					0.37	PO ₄	00.10	M													5001	5006	
01-28-69 1120	1.3		1.33	0.13					0.11	PO ₄	00.01	MY													5001	5006	
02-26-69 1020	0.2		0.80	<0.08					0.08	PO ₄	00.06	M													5001	5006	
03-27-69 1030	0.4		0.33	0.08					0.07	PO ₄	00.06	M	DON	00.31	M	PON	00.02	M							5001	5006	
09-17-69 0810	0.18		0.75	0.05					0.50	PO ₄	00.29	M													5001	5006	
EO B 803.6	159.3	SUISUN BAY OFF MIDDLE POINT NEAR NICHOLS																									
10-30-68 1045	0.8		0.54	<0.08					0.04	PO ₄	00.01	M														5001	5006
11-25-68 1005	<0.1		0.55	0.08					0.08	PO ₄	00.02	M														5001	5006
12-18-68 1330	0.4		0.60	0.24					0.33	PO ₄	00.10	M														5001	5006
01-28-69 1210	1.0		1.34	<0.08					0.07	PO ₄	00.01	M														5001	5006
02-26-69 1110	0.4		0.18	<0.08					0.08	PO ₄	00.06	M														5001	5006
03-27-69 1140	0.3		0.60	<0.08					0.06	PO ₄	00.05	M	DON	00.46	M	PON	00.14	M								5001	5006
05-08-69 0830	0.3		0.70	<0.08					0.09	PO ₄	00.06	M														5001	5006
09-18-69 1055	0.09		0.43	0.02					0.15	PO ₄	00.07	M														5001	5006
EO B 804.0	203.0	SUISUN BAY NEAR PRESTON POINT																									
10-30-68 1130	0.8		0.65	0.1					0.04	PO ₄	00.02	M														5001	5006
11-25-68 0950	0.5		0.75	0.13					0.09	PO ₄	00.01	M														5001	5006
12-18-68 1310	0.6		0.95	0.40					0.35	PO ₄	00.11	M														5001	5006
01-28-69 1140	1.2		1.11	0.08					0.11	PO ₄	00.01	M														5001	5006
02-26-69 1035	0.1		0.41	<0.08					0.08	PO ₄	00.06	M														5001	5006
03-27-69 1055	0.4		0.68	<0.08					0.07	PO ₄	00.05	M				PON	00.19	M							5001	5006	
05-08-69 0805	0.2		0.70	<0.08					0.09	PO ₄	00.06	M														5001	5006
09-17-69 0840	0.09		0.50	<0.005					0.14	PO ₄	00.09	M														5001	5006
EO B 804.4	156.2	HONKER BAY NEAR WHEELER POINT																									
10-28-68 --	<0.1		<0.08	<0.08					0.03	PO ₄	00.02	M														5001	5006
11-26-68 0945	0.4		0.70	0.08					0.07	PO ₄	00.02	M														5001	5006
12-17-68 1320	0.4		0.46	0.22					0.36	PO ₄	00.01	MY														5001	5006

TABLED-5
NUTRIENTS IN SURFACE WATER
CENTRAL COASTAL AREA

DATE TIME	NUTRIENTS (Mg/L)							MISCELLANEOUS NUTRIENTS								SAMP	LAB				
	NITROGEN SERIES AS N					PHOSPHATE SERIES AS P		CODE	VALUE	UR	CODE	VALUE	UR	CODE	VALUE			UR	CODE	VALUE	UR
	NO ₃	NO ₂	ORG	NH ₄	TOTAL	ORTHO	HYDRO														
EO B 804.4 156.2 HONKER BAY NEAR WHEELER POINT (Continued)																					
01-29-69 1140	0.3		1.06	0.13				0.07	PO ₄	00.02	M									5001	5006
02-27-69 1105	<0.1		0.32	0.08				0.07	PO ₄	00.05	M									5001	5006
03-28-69 1125	0.3		0.65	0.20				0.07	PO ₄	00.05	M	DON	00.38	M	PON	00.27	M			5001	5006
05-07-69 0755	0.3		1.50	<0.08				0.29	PO ₄	00.17	M									5001	5006
09-17-69 0920	0.10		0.69	<0.005				0.16	PO ₄	00.08	M									5001	5006
EO B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH																					
10-28-68 --	<0.1		0.09	<0.08				0.01	PO ₄	00.01	MY									5001	5006
11-26-68 0905	0.2		0.60	0.08				0.07	PO ₄	00.02	M									5001	5006
12-17-68 1230	0.6		0.70	0.46				0.38	PO ₄	00.09	M									5001	5006
01-29-69 1030	0.4		1.11	<0.08				0.09	PO ₄	00.01	M									5001	5006
02-27-69 1010	<0.1		0.27	<0.08				0.06	PO ₄	00.03	M									5001	5006
03-28-69 1025	0.3		0.57	<0.08				0.08	PO ₄	00.05	M	DON	00.54	M	PON	00.03	M			5001	5006
05-07-69 0705	0.2		1.40	<0.08				0.08	PO ₄	00.06	M									5001	5006
06-11-69 1525	0.2		0.60	<0.08				0.05	PO ₄	00.01	M									5001	5006
07-23-69 1215	0.2		0.88	<0.005				0.32	PO ₄	00.04	M	DON	00.39	M	PON	00.49	M			5001	5006
08-20-69 1125	<0.05		0.53	0.01				0.20	PO ₄	00.02	M	DON	00.10	M	PON	00.43	M			5001	5006
09-18-69 1015	0.09		0.29	0.09				0.19	PO ₄	00.07	M	DON	00.28	M	PON	00.01	MY			5001	5006
EO S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS																					
10-31-68 --	0.3		<0.08	<0.08				0.02	PO ₄	00.01	MY									5001	5006
02-12-69 1015	0.5		1.80	0.34				0.08	PO ₄	00.06	M									5001	5006
05-12-69 1035	0.3		1.50	<0.08				0.03	PO ₄	00.01	MY									5001	5006
08-05-69 1030	0.5		0.50	0.15				0.07	PO ₄	00.04	M									5001	5006
EO S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND																					
10-30-68 1215	0.7		0.8	<0.08				0.01	PO ₄	00.02	M									5001	5006
05-12-69 1430	0.3		0.22	<0.08				0.18	PO ₄	00.17	M									5001	5006
08-05-69 1500	0.5		0.53	<0.08				0.13	PO ₄	00.08	M									5001	5006
EO S 811.0 204.8 CHADBOURNE SLOUGH AT CHADBOURNE ROAD																					
10-31-68 --	0.3		<0.08	<0.08				0.03	PO ₄	00.01	MY									5001	5006
02-12-69 1230	0.6		1.54	0.22				0.08	PO ₄	00.04	M									5001	5006
05-12-69 1245	0.3		0.90	<0.08				0.07	PO ₄	00.04	M									5001	5006
08-05-69 1300	0.5		0.20	0.09				0.08	PO ₄	00.04	M									5001	5006
EO S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD																					
10-31-68 --	0.3		0.70	<0.08				<0.01	PO ₄	00.01	MY									5001	5006
02-12-69 1420	0.5		1.52	0.28				0.06	PO ₄	00.04	M									5001	5006

TABLE D-5
NUTRIENTS IN SURFACE WATER
CENTRAL COASTAL AREA

DATE TIME	NUTRIENTS (Mg/L)								MISCELLANEOUS NUTRIENTS												SAMP	LAB
	NITROGEN SERIES AS N				PHOSPHATE SERIES AS P				CODE	VALUE	UR	CODE	VALUE	UR	CODE	VALUE	UR	CODE	VALUE	UR		
	NO ₃	NO ₂	ORG	NH ₄	TOTAL	ORTHO	HYDRO	TOTAL														
EO S 811.2	158.5	MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD (Continued)																				
05-12-69 1345	0.2		<0.08	<0.08				0.07	PO ₄	00.05	M										5001	5006
08-05-69 1420	0.4		0.53	0.09				0.06	PO ₄	00.03	M										5001	5006
EO S 811.5	207.2	CORDELIA SLOUGH AT UPPER END NEAR CORDELIA																				
10-31-68 --	0.7		0.65	<0.08				0.04	PO ₄	00.02	M										5001	5006
05-12-69 1135	0.2		0.50	<0.08				0.06	PO ₄	00.03	M										5001	5006
08-05-69 1145	0.5		0.59	0.15				0.10	PO ₄	00.06	M										5001	5006
EO S 813.6	201.2	HILL SLOUGH AT GRIZZLY ISLAND ROAD																				
10-30-68 1355	0.7		0.90	0.08				0.10	PO ₄	00.05	M										5001	5006
02-12-69 1325	0.2		2.35	0.25				0.25	PO ₄	00.21	M										5001	5006
05-12-69 1315	0.3		1.42	<0.08				0.12	PO ₄	00.07	M										5001	5006
08-05-69 1345	0.7		0.14	<0.08				0.32	PO ₄	00.27	M										5001	5006
E1 O 749.4	233.2	PACIFIC OCEAN AT POTATO PATCH SHOAL NEAR POINT BONITA																				
09-15-69 1150	0.17		0.10	0.01			0.05	0.01	0.08	FTP	00.06	M									5050	5050
E3 1100.50	NAPA RIVER AT DUTTON LANDING																					
10-15-68 0945	0.14	0.00	0.4	0.09		0.09	0.09	0.17													5050	5050
12-09-68 1120	0.62	0.03	0.6	0.04		0.08	0.02	0.18													5050	5050
02-05-69 1115	1.10	0.01	0.6	0.40		0.15	0.06	0.25													5050	5050
04-07-69 1200	0.89	0.02	0.5	0.11		0.10	0.04	0.37													5050	5050
06-04-69 1225	0.15	0.01	0.7	0.14		0.10	0.06	0.40													5050	5050
08-13-69 1105	0.06	0.00	0.6	0.00		0.05	0.08	0.18													5050	5050
E5 1150.00	ALAMEDA CREEK NEAR NILES																					
11-07-68 1115	2.0	0.01	0.4	0.02		1.3	0.0	1.3													5050	5050
01-08-69 1027	2.8	0.07	0.7	0.15		1.37	0.13	1.57													5050	5050
03-12-69 1115	1.2	0.06	0.4	0.00		0.37	0.10	0.70													5050	5050
05-01-69 1030	1.7	0.24	0.7	0.25		1.5	0.0	1.5													5050	5050
08-13-69 0700	1.9	0.00	0.6	0.00		2.1	0.0	2.1													5050	5050
E8 O 744.4	231.2	PACIFIC OCEAN OFF OCEAN AVENUE AT SAN FRANCISCO																				
09-15-69 1115	0.12		0.3	0.02		0.03	0.00	0.06	FTP	00.03	M										5050	5050
F9 1080.50	RUSSIAN RIVER AT GUERNEVILLE																					
11-06-68 0830	0.53	0.02	0.6	0.19		0.43	0.17	0.77													5050	5050
01-07-69 1030	1.0	0.02	0.2	0.17		0.09	0.04	0.15													5050	5050
03-13-69 0845	0.70	0.02	0.2	0.02		0.04	0.01	0.26													5050	5050
04-24-69 1200	0.48	0.03	0.3	0.14		0.13	0.05	0.23													5050	5050
09-16-69 0630	0.06		0.1	0.00		0.24	0.00	0.24													5050	5050

TABLE D-6

PESTICIDES IN SURFACE WATER AND SEDIMENT

Abbreviations used in the following table include:

- BHC - Benzene hexachloride

- ppDDD - Para para isomer of dichloro diphenyl dichloroethane

- ppDDE - Para para isomer of dichloro diphenyl ethane

- DDT - Dichloro diphenyl trichlorethane

- ppDDT - Para para isomer of dichloro diphenyl trichlorethane

Where two pesticides are reported together with a slash mark separating them (ppDDE/Dieldrin, Simazine/Atrazine, etc.), the reported concentration is an undifferentiated total of the two. Either of the two pesticides could make up the entire total.

TABLE D-6
PESTICIDES IN SURFACE WATER AND SEDIMENT
CENTRAL COASTAL AREA

Station Number	Station	Date and Time Sampled (P.S.T)	Pesticides in Water (nanograms per liter)	Pesticides in Sediment (micrograms per liter of dry weight)
EO B 735.5 219.4	SAN FRANCISCO BAY, SOUTH, AT COYOTE POINT	10-22-68 1030	Dieldrin = 4 ppDDD = 6 ppDDT = 9 Unknown as DDT = 3 Unknown as DDT = 4 Unknown as DDT = 9	No chlorinated pesticides detected
		2- 4-69 1750	BHC = 4	
		6- 5-69 1630	Unknown as DDT = 8	
EO B 736.2 211.6	SAN FRANCISCO BAY AT SAN MATEO BRIDGE	10-15-68 0855	BHC = 6 Dieldrin = 4 ppDDT = 6 BHC = 5	Complex chlorinated compounds as DDT = 0.024
		2- 5-69 0835		
		6- 4-69 1045	Unknown as DDT = 5 Unknown as DDT = 6	
EO B 748.4 228.2	SAN FRANCISCO BAY AT FORT POINT	10-14-68 0945	ppDDT = 11	Unknown as DDT = 1 ppDDD = 4
		2- 6-69 0735	No chlorinated pesticides detected	
		6- 3-69 0720	Unknown as DDT = 8	
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND	10-14-68 1045	No chlorinated pesticides detected	Unknown as DDT = 1 ppDDD = 4
		11- 6-68 0704	No chlorinated pesticides detected	
		2- 5-69 0720	Unknown as DDT = 4	
		6- 4-69 0840	Unknown as DDT = 32	
EO B 757.7 225.6	SAN PABLO BAY AT POINT SAN PABLO	10-15-68 1020	No chlorinated pesticides detected	DDD = 10
		2- 6-69 0830	BHC = 4	
		6- 3-69 0930	Unknown as DDT = 12	
EO B 802.3 207.1	SUISUN BAY OFF BULLS HEAD POINT AT MARTINEZ	10-30-68 1045	Lindane = 15	
		11-25-68 0920	Heptachlor like = 42	
EO B 802.4 208.2	SUISUN BAY AT BENICIA (END OF PIER)	10-14-68 1300	No chlorinated pesticides detected	No chlorinated pesticides detected
		12-10-68 1100	Unknown as DDT = 8	
		2- 6-69 1015	No chlorinated pesticides detected	
EO B 802.5 208.1	SUISUN BAY AT BENICIA (MIDDLE OF PIER)	4- 8-69 1120	BHC = 4 Dieldrin = 3 ppDDD = 5 ppDDT = 2	
		6- 6-69 1245	Unknown as DDT = 11 ppDDD = 3	
		8-12-69 0950	Complex chlorinated compounds as DDT = 19100 Unknown as parathion = 6 Unknown as parathion = 6	
E3 1100.50	NAPA RIVER AT DUTTON LANDING	10-15-68 --	BHC = 12 ppDDE = 7 ppDDD = 5 ppDDT = 3	ppDDD = 2 ppDDT = 1
		10-22-68 1025		
		2-11-69 1030	BHC = 6	
		6- 4-69 1225	BHC = 6 Unknown as DDT = 400	

TABLE D-7
PLANKTON ANALYSIS OF SURFACE WATER

DATE TIME	PHYTOPLANKTON (NO./ML)					MOST ABUNDANT PHYTOPLANKTON (GENUS / %)								ZOOPLANKTON (NO./L)				MOST ABUNDANT ZOOPLANKTON (GENUS/%)			SAMP	LAB
	TOTAL	BL-GR C/F	GREEN C/F	FLAG GR/O	DIATOMS C/P	1	2	3	4	5	6	7	8	TOTAL	ROTIFER	CRUST	MISC	1	2	3		
EO B 735.0 215.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)																						
09-16-69 0950	480			480		F 99 100.0								41		41		C 50 82.9	C 02 17.1		5050	5050
EO B 736.2 211.6 SAN FRANCISCO BAY AT SAN MATEO BRIDGE																						
10-15-68 0855	258			130	128	F 99 50.4	D 03 24.8	D 04 12.4	D 08 12.4					82	10	67	5	C 99 81.7	R 99 12.2	M 04 6.1	5050	5050
08-13-69 0930	1262			1100	162	F 99 87.2	D 03 10.3	D 04 2.5													5050	5050
EO B 748.1 222.4 SAN FRANCISCO BAY WEST OF YERBA BUENA ISLAND																						
09-16-69 1100	774			580	130 64	F 99 75.0	D 03 16.8	D 65 4.1	D 66 4.1					37	3	34		C 02 45.9	C 50 43.3	R 99 8.1	5050	5050
EO B 748.4 228.2 SAN FRANCISCO BAY AT FORT POINT																						
10-14-68 0945	256			160	96	F 99 62.5	D 03 25.0	D 09 12.5						82	19	53	10	C 02 64.6	R 99 23.2	M 02 12.2	5050	5050
08-12-69 0710	476			412	32 32	F 99 79.8	F 54 6.8	D 08 6.7	D 66 6.7												5050	5050
EO B 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND																						
10-14-68 1045	128		64	322	96 32	F 99 56.4	G 22 12.5	D 03 6.3	D 05 6.2	D 08 6.2	D 64 6.2	F 54 6.2	D 02 *	161	63	95	3	C 99 59.0	R 99 39.1	M 03 1.9	5050	5050
08-13-69 0810	932			900	32	F 99 96.6	D 02 3.4														5050	5050
EO B 757.7 225.6 SAN PABLO BAY AT POINT SAN PABLO																						
10-15-68 1020	224			96	96 32	F 99 42.9	D 03 28.5	D 02 14.3	D 51 14.3					69		60	9	C 02 87.0	M 02 13.0		5050	5050
08-12-69 0820	320			224	96	F 99 50.0	D 02 30.0	F 54 20.0													5050	5050
EO B 757.7 226.2 SAN PABLO STRAIT WEST OF THE BROTHERS																						
09-16-69 1200	1100			1100		F 99 100.0								75	2	73		C 02 52.0	C 50 42.3	R 99 2.7	5050	5050
EO B 802.4 208.2 SUISUN BAY AT BENICIA (END OF PIER)																						
10-14-68 1300	386		226	96	64	G 02 33.7	G 22 24.9	F 99 24.9	D 02 16.5					34	10	24		C 02 41.1	C 50 29.4	R 99 29.4	5050	5050
EO B 802.5 208.1 SUISUN BAY AT BENICIA (MIDDLE OF PIER)																						
08-12-69 0950	11894		130	770	10800 194	D 02 62.2	D 03 12.6	D 08 8.4	D 04 7.6	F 99 6.5	G 15 1.1	D 66 1.1	D 70 0.5								5050	5050
E3 1100.50 NAPA RIVER AT DUTTON LANDING																						
10-15-68 0945	220			220		F 99 100.0								189	14	175		C 02 90.0	R 99 7.4	C 50 2.6	5050	5050
08-13-69 1105	1534		64 0	580	700 190	F 99 37.8	D 02 22.8	D 03 22.8	D 66 12.4	G 02 2.1	G 22 2.1										5050	5050

The following are the codes and abbreviations used in this table.

PHYTOPLANKTON

- Total - Total phytoplankton count per milliliter
Bl-Gr - Blue Green Algae
C/F - Coccolid over Filamentous (undifferentiated if dividing line not shown)
Green - Green Algae
Flag - Flagellates
Gr/O - Green over Other Pigmented (undifferentiated if dividing line not shown)
C/P - Centric over Pennate (undifferentiated if dividing line not shown)
Most Abundant Plankton - Indicates specific genus code over its percentage of total

Green Algae

- Coccolid
G 02 Ankietrondesmus
G 15 Scenedesmus
G 22 Selenastrum

Flagellates

- Other Pigmented
F 54 Dinoflagellates (Dinophyceae)
F 99 Unidentified Other

Diatoms

- Centric
D 02 Coscinodiscus
D 03 Cyclotella
D 04 Melosira (salt water)
D 05 Melosira (fresh water)
D 08 Skeletonema
D 09 Chaetoceros

Pennate

- D 51 Achnanthes
D 64 Gyrodinium
D 65 Navicula
D 66 Nittechia
D 70 Synedra

ZOOPLANKTON

- Total - Total zooplankton count per milliliter
Crust - Crustacea
Misc - Miscellaneous zooplankton

Most Abundant Zooplankton

- Rotifers
R 99 Unidentified Rotifers

Crustacea

- C 02 Nauplii
C 50 Unidentified Copepod
C 99 Unidentified Crustacea

Miscellaneous

- M 02 Annelid Worms
M 03 Fish Larvae
M 04 Pulvulinina (Amebas)

Appendix E

GROUND WATER QUALITY

INTRODUCTION

This appendix presents ground water quality data collected during the period from October 1, 1968, through September 30, 1969. The data were collected from a number of major ground water sources in the Central Coastal Area in cooperation with other state, local, and federal agencies. During the 1969 water year, 265 wells were sampled in 20 ground water basins and subbasins or subareas.

At the time of field sampling, pH and temperature measurements are normally made. Comments on current conditions are noted in field books which are available in the files of the Department of Water Resources.

Laboratory analyses of ground waters were performed in accordance with "Standard Methods for the Examination of Water and Wastewater", 12th Edition.

The Region and Basin and State Well Numbering Systems are described in Appendix C, "Ground Water Measurements", on page 29. The locations of the ground water basins and subbasins are shown on Figure C-1, pages 31, 32, and 33.

INDEX TO GROUND WATER QUALITY DATA
IN THE CENTRAL COASTAL AREA

<u>Number</u>	<u>Name</u>	<u>Page</u>
NORTH COASTAL REGION 1-00.00		
1-15.00	Ukiah Valley	112
1-16.00	Sanel Valley	112
1-17.00	Alexander Valley	112
1-18.00	Santa Rosa Valley	112
1-19.00	Anderson Valley	113, 125
1-20.00	Point Arena	113, 125
1-21.00	Fort Bragg Terrace	113, 125
SAN FRANCISCO BAY REGION 2-00.00		
2-01.00	Petaluma Valley	113
2-02.00	Napa-Sonoma Valley	
2-02.01	Napa Valley	114
2-02.02	Sonoma Valley	115
2-03.00	Suisun-Fairfield Valley	115
2-04.00	Pittsburg Plain	116
2-05.00	Clayton Valley	116
2-06.00	Ygnacio Valley	117
2-09.00	Santa Clara Valley	
2-09.01	East Bay Area	117
2-09.02	South Bay Area	119
2-10.00	Livermore Valley	120
CENTRAL COASTAL REGION 3-00.00		
3-02.00	Pajaro Valley	120
3-04.00	Salinas Valley	121
3-07.00	Carmel Valley	123, 125, 126

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

An explanation of column headings follows:

The Lab and Sampler agency codes are as follows:

- 2400 - Santa Clara Valley Water Conservation District
- 5000 - U. S. Geological Survey
- 5050 - Department of Water Resources
- 5100 - Alameda County Flood Control and Water Conservation District
- 5112 - Sonoma County
- 5401 - Alameda County Water District

- Time - Pacific Standard Time on a 24-hour clock.
- Temp. - Water temperature in degrees Fahrenheit at the time of field sampling.
- pH - Measurement of acidity or alkalinity of water.
- EC - The electrical conductance in micromhos at 25° Celsius.
- TDS - Gravimetric determination of total dissolved solids at 180° Celsius.
- SUM - Total dissolved solids determined by addition of analyzed constituents.
- TH - Total hardness.
- NCH - Noncarbonate hardness.

The Mineral Constituents are as follows:

B	Boron	K	Potassium
Ca	Calcium	Mg	Magnesium
Cl	Chloride	Na	Sodium
CO ₃	Carbonate	NO ₃	Nitrate
F	Fluoride	SiO ₂	Silica
HCO ₃	Bicarbonate	SO ₄	Sulfate

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in									Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
NORTH COASTAL REGION 1-00.00																	
UKIAH VALLEY 1-15.00																	
14N/12W-05K01 M	69	7.8	430	28	19	35	1.4	0	209	52	5.8	1.1	0.8	262	150		
7-09-69 5050		7.4	600	1.40	1.60	1.52	0.04		3.42	1.08	0.16	0.02				0	
1145 5050				30	36	33	1		73	23	0.3	1					
14N/12W-26K01 M	63	8.0	398	26	29	14	0.3	0	205	24	14	5.8	1.0	232	186		
7-09-69 5050		7.0	410	1.30	2.42	0.61	0.01		3.36	0.50	0.39	0.09				18	
1045 5050				30	56	14	0		77	12	9	2					
16N/12W-05D02 M	62	8.1	296	15	15	26	0.5	0	164	4.3	13	0.1	0.1	162	100		
7-09-69 5050		6.9	295	0.75	1.25	1.13	0.01		2.69	0.09	0.37	0.00				0	
1400 5050				24	40	36	0		85	3	12	0					
16N/12W-09Q01 M	75	8.5	387	26	18	36	0.5	3	237	11	7.8	0.1	0.1	227	141		
7-09-69 5050		7.4	395	1.30	1.52	1.57	0.01	0.10	3.88	0.23	0.22	0.00				0	
1315 5050				30	35	35	0	2	88	5	5	0					
SANEL VALLEY 1-16.00																	
12N/11W-02F01 M	63	8.3	336	35	20	9.4	1.6	0	200	17	4.2	2.4	0.2	179	171		
7-08-69 5050		7.7	340	1.75	1.67	0.41	0.04		3.28	0.35	0.12	0.04				7	
1630 5050				45	43	11	1		87	9	3	1					
13N/11W-18E01 M	61	8.4	365	26	24	17	1.1	5	191	17	11	6.8	2.8	187	163		
7-09-69 5050		6.9	375	1.30	1.96	0.74	0.03	0.17	3.13	0.35	0.31	0.11				0	
0900 5050				32	49	18	1	4	77	9	8	2					
13N/11W-30H01 M	60	7.9	420	34	28	11	0.9	0	187	41	9.8	22	0.2	231	202		
7-09-69 5050		6.8	435	1.70	2.30	0.48	0.02		3.06	0.85	0.28	0.35				49	
0945 5050				38	50	11	1		67	19	6	8					
ALEXANDER VALLEY 1-17.00																	
09N/08W-07Q01 M	80	8.5	581	4.1	0.7	130	5.8	12	299	0.5	18	1.2	0.5	402	13		
7-08-69 5050		8.1	590	0.20	0.06	5.66	0.15	0.40	4.90	0.01	0.51	0.02				0	
1315 5050				3	1	94	2	7	83	0	9	1					
09N/09W-01P01 M	60	8.2	333	28	24	8.0	0.5	0	194	18	4.3	4.2	0.1	150	167		
7-08-69 5050		7.1	345	1.40	1.94	0.35	0.01		3.18	0.37	0.12	0.07				8	
1400 5050				38	52	9	1		85	10	3	2					
10N/09W-26L01 M	64	8.6	568	30	57	11	0.5	18	310	32	8.0	19	0.1	307	309		
7-08-69 5050		7.5	600	1.50	4.67	0.48	0.01	0.60	5.08	0.67	0.22	0.31				55	
1440 5050				23	70	7	0	9	74	10	3	4					
11N/10W-28N01 M	62	8.2	318	32	16	9.2	1.3	0	181	17	4.9	0.5	0.3	161	148		
9-08-69 5050		7.3	365	1.60	1.36	0.40	0.03		2.97	0.35	0.14	0.01				0	
1540 5050				47	40	12	1		86	10	4	0					
SANTA ROSA VALLEY 1-18.00																	
06N/07W-18R01 M		8.5	758	56	36	59	1.3	20	310	42	43	40	0.2	413	289		
7-07-69 5050		7.0	790	2.79	2.98	2.57	0.03	0.67	5.08	0.87	1.21	0.64				35	
1315 5050				33	36	31	0	8	60	10	14	8					
06N/08W-03B01 M	67	8.1	458	29	26	20	1.5	0	141	12	55	27	0.1	285	178		
7-07-69 5050		7.3	460	1.45	2.11	0.87	0.04		2.31	0.25	1.55	0.44				62	
1445 5050				32	47	19	2		51	5	34	10					
07N/07W-15C01 M	66	8.2	251	15	9.8	23	4.2	0	152	4.6	5.5	0.2	0.0	169	78		
7-08-69 5050		7.6	255	0.75	0.81	1.00	0.11		2.49	0.10	0.16	0.0				0	
0900 5050				28	30	37	5		91	4	5	0					
07N/08W-05G01 M	69	8.1	552	30	29	33	5.0	0	159	15	53	68	0.0	392	196		
7-07-69 5050		7.0	560	1.50	2.42	1.44	0.13		2.61	0.31	1.50	1.10				66	
1645 5050				28	44	27	1		48	2	29	21					
07N/08W-18Q01 M	65	8.1	674	35	29	66	6.2	0	300	13	73	5.9	0.3	320	206		
7-08-69 5050		7.5	700	1.75	2.37	2.87	0.16		4.92	0.27	2.06	0.10				0	
1100 5050				24	35	40	1		67	4	28	1					
07N/08W-30P01 M	64	8.4	1040	70	55	55	2.2	0	216	46	144	126	0.1	638	401		
7-07-69 5050		6.9	1100	3.49	4.52	2.39	0.06		3.54	0.96	4.06	2.03				224	
1515 5050				33	43	23	1		33	9	38	20					
07N/09W-09F01 M	65	7.8	152	9.6	3.6	15	1.3	0	55	10	12	0.5	0.0	112	39		
7-07-69 5050		6.8	160	0.48	0.30	0.65	0.03		0.90	0.21	0.34	0.01				0	
1615 5050				33	21	45	1		62	14	23	1					
09N/10W-01C01 M	72	8.1	208	12	10	17	0.5	0	121	2.1	6.9	0.0	0.0	175	71		
7-08-69 5050		7.3	200	0.60	0.82	0.74	0.01		1.98	0.04	0.19					0	
1200 5050				28	38	34	0		90	2	8						

116166.00
580
500

20.2

35
29
66
6.2
6

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in										Milligrams per Liter				
				Milliequivalents per Liter Percent Reactance Value										TDS TH				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	SUM	NCH	
ANDERSON VALLEY 1-19.00																		
13N/14W-02L01 M 9-12-69 0945 5050	65	---	---															
		6.7	220															
13N/14W-11A01 M 9-12-69 0925 5050	65	---	---															
		7.0	258															
14N/14W-18R02 M 9-11-69 1115 5050	70	---	---															
		5.9	140															
14N/14W-19B01 M 9-11-69 5050 1030 5050	68	7.2 6.5	231 262	17 0.85 36	8.5 0.70 30	18 0.78 33	1.5 0.04 2	0	88 1.44 63	5.3 0.11 5	26 0.73 32	0.1		0.2		120 120	76 4	
14N/14W-34G06 M 9-12-69 5050 0915 5050	75	6.7 7.6	560 545	25 1.25 21	16 1.32 22	77 3.35 56	0.8 0.02	0	277 4.54 77	0.0	49 1.38 23	0.0		3.9		306 307	128 0	
POINT ARENA 1-20.00																		
12N/16W-18K01 M 9-11-69 1740 5050	60	---	---															
		5.6	421															
12N/17W-12L01 M 9-11-69 1610 5050	60	---	---															
		6.1	125															
13N/16W-31M01 M 9-11-69 1535 5050	63	---	---															
		6.3	465															
13N/17W-24D01 M 9-11-69 1545 5050	60	---	---															
		6.3	250															
13N/17W-25H01 M 9-11-69 1610 5050	63	---	---															
		6.6	420															
FORT BRAGG TERRACE 1-21.00																		
17N/17W-30F01 M 9-11-69 5050 1310 5050	63	6.8 5.9	700 710	33 1.65 26	20 1.64 26	68 2.96 47	2.1 0.05 1	0	29 0.48 8	18 0.37 6	169 4.77 76	40 0.64 10		0.0		386 364	165 141	
17N/17W-30M01 M 9-11-69 1350 5050	60	---	---															
		6.5	355															
18N/17W-07K01 M 9-11-69 1125 5050	64	---	---															
		5.8	192															
18N/17W-19D01 M 9-11-69 5050 1215 5050	56	---	258 265			31 1.35 52					51 1.44 55	22 0.35 13					34 34	
19N/17W-20N01 M 9-11-69 5050	60	---	---															
		6.3	220															
19N/17W-30G01 M 9-11-69 1240 5050	63	---	---															
		5.8	320															
19N/17W-30Q01 M 9-11-69 1100 5050	57	---	---															
		6.6	390															
SAN FRANCISCO BAY REGION 2-00.00																		
PETALUMA VALLEY 2-01.00																		
03N/06W-01Q01 M 8-05-69 5050 1400 5050	70	---	1260 1300			234 10.18					150 4.23							
03N/06W-03C01 M 8-05-69 5050 1545 5050	70	---	3960 4000			338 14.70					1160 32.72			0.4				
03N/06W-11B01 M 8-05-69 5050 1445 5050	69	---	1850 1800			310 13.48					338 9.53							

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
PETALUMA VALLEY 2-01.00 (Continued)																	
03N/06W-16H01 M 8-05-69 5050 1130 5050	70	---	179 165										14 0.39				
03N/06W-18M01 M 8-05-69 5050 0915 5050	64	---	540 560										39 1.10				
03N/07W-14F01 M 8-05-69 5050 1000 5050	65	---	601 610										62 1.75				
04N/06W-08E01 M 8-15-69 5050 1045 5050	68	8.5 7.9	927 1100	36 1.80 17	64 5.29 50	78 3.39 32	0.6 0.02 1	0	487 7.98 76	30 0.62 6	48 1.35 13	33 0.53 5	2.2		570	355 0	
04N/06W-21Q01 M 8-07-69 5050 0830 5050	72	---	1040 1025			212 9.22							145 4.09	0.9			
04N/06W-33R01 M 8-05-69 5050 1630 5050	69	---	8670										2810 79.24				
05N/06W-30D01 M 8-07-69 5050 1245 5050	66	---	874 860										87 2.45	0.6			
05N/07W-20L03 M 8-07-69 5050 1130 5050	67	8.2 7.1	1210 1200	140 6.99 57	16 1.36 12	88 3.85 31	1.7 0.04 0	0	241 3.95 32	72 1.50 12	225 6.35 51	44 0.71 5	0.0		777	418 220	
05N/07W-26E01 M 8-07-69 5050 1215 5050	67	---	754 750			61 2.65							79 2.23				
05N/07W-34E02 M 8-07-69 5050 1100 5050	68	---	847 820										67 1.89				
NAPA VALLEY 2-02.01																	
03N/03W-18G01 M 7-11-69 5050 1415 5050	67	---	929 1100			82 3.57							155 4.37	10 0.16	0.2		
03N/03W-18G02 M 7-11-69 5050 1345 5050	66	---	1170 1300										162 4.57	56 0.90	0.1		
04N/04W-02L01 M 7-10-69 5050 1445 5050	66	---	748 775										93 2.62		0.1		
04N/04W-05C01 M 7-11-69 5050 1115 5050	70	---	290 295										29 0.82	20 0.32	0.0		
04N/04W-05D02 M 7-11-69 5050 1100 5050	71	---	748 760										85 2.40				
04N/04W-12M01 M 7-10-69 5050 1600 5050	68	---	924 960										124 3.50				
04N/04W-13E01 M 7-10-69 5050 1615 5050	65	---	2540 2700										476 13.43	125 2.01	0.0		
04N/04W-14C02 M 7-10-69 5050 1545 5050	69	---	1440 1600										392 9.28				
05N/04W-09Q02M 7-11-69 5050 0745 5050	64	---	470 450										34 0.96				
05N/04W-11F03 M 7-10-69 5050 1330 5050	65	8.0 7.5	675 675	17 0.85 13	8.6 0.75 12	112 4.87 74	5.1 0.13 1	0	220 3.60 54	0.8 0.02 1	106 2.99 45	0.2 0.00 0	2.4		414	78 0	
05N/04W-15E01 M 7-11-69 5050 0700 5050	64	---	389 400										31 0.87		0.1		
05N/04W-20R02 M 7-11-69 5050 1000 5050	67	8.0 6.9	681 700	30 1.50 23	17 1.38 22	80 3.48 54	1.2 0.03 1	0	144 2.36 37	18 0.37 6	99 2.79 44	53 0.85 13	0.1		417	144 26	

TABLE E-1 (Cont.)

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in										Milligrams per Liter				
				Milliequivalents per Liter Percent Reactance Value										Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH	
NAPA VALLEY 2-02.01 (Continued)																		
05N/04W-21P02 M 7-11-69 5050 0930 5050	69	---	2300 2500										442 12.46					
05N/04W-22M01 M 7-11-69 5050 0900 5050	74	---	569 580										32 0.90					
05N/04W-22M02 M 7-11-69 5050 0845 5050	72	7.6 6.8	230 235	10 0.50 23	6.6 0.54 24	24 1.04 46	6.1 0.16 7	0	75 1.23 55	24 0.50 23	13 0.37 17	7.3 0.12 5		0.1		229	52 0	
05N/04W-29H01 M 7-11-69 5050 1020 5050	69	---	361 365										26 0.73	0.0				
06N/04W-06P01 M 7-10-69 5050 1130 5050	67	7.9 6.8	361 360	18 0.90 24	26 2.16 58	15 0.65 17	1.0 0.02 1	0	137 2.24 61	40 0.83 22	12 0.34 9	19 0.31 8		0.0		243	153 41	
06N/04W-15Q01 M 7-10-69 5050 1215 5050	70	---	239 245			28 1.22							6.7 0.19	2.0 0.03				
09N/07W-25N01 M 7-10-69 5050 1015 5050	80	7.9 7.6	924 960	12 0.60 7	3.9 0.32 4	169 7.35 86	12 0.31 3	0	191 3.13 37	1.2 0.02 1	187 5.28 62	20 0.03 0		11		599	46 0	
SONOMA VALLEY 2-02.02																		
04N/05W-14D02 M 8-07-69 5050 1540 5050	64	---	967 950										79 2.23					
05N/05W-18D02 M 8-08-69 5050 0830 5050	64	8.1 6.8	519 525	28 1.40 27	23 1.92 36	44 1.91 36	1.9 0.05 1	0	188 3.08 58	27 0.56 11	37 1.04 20	38 0.61 11		0.2		348	166 12	
05N/05W-20R01 M 8-07-69 5050 1445 5050	62	---	811 800			198 8.61							49 1.38	4.4				
05N/06W-12F01 M 8-08-69 5050 0945 5050	66	---	420 430										33 0.93	0.7				
05N/06W-25P02 M 8-07-69 5050 1330 5050	64	---	540 540										23 0.65	1.3				
06N/06W-23M02 M 8-08-69 5050 1030 5050	66	8.2 7.6	491 490	13 0.65 14	8.4 0.69 15	69 3.00 64	14 0.36 7	0	142 2.33 51	1.2 0.02 1	79 2.23 48	0.1 0.00 0		1.4		336	67 0	
06N/06W-26E01 M 8-15-69 5050 0900 5050	68	---	412 420										54 1.52	1.4 2.0				
SUISUN-FAIRFIELD VALLEY 2-03.00																		
03N/01E-04B01 M 7-16-69 5050 1450 5050	88	---	1340 1400										244 6.88	0.8				
03N/01E-22F02 M 7-16-69 5050 1530 5050	74	8.2 8.1	1750 1750	37 1.85 10	31 2.55 14	317 13.79 76	3.0 0.08 0	0	516 8.46 47	72 1.50 8	259 7.31 41	40 0.64 4		4.3		1030	220 0	
04N/01W-33A01 M 7-22-69 5050 1100 5050	65	8.5 7.7	3530 4000	30 1.50 4	48 3.99 12	662 28.80 84	4.7 0.12 0	0	478 7.83 23	153 3.18 9	826 23.30 68	2.3 0.14 0		18		1980	275 0	
04N/01E-08F01 M 7-16-69 5050 1430 5050	73	---	976 950										157 4.43	0.9				
04N/02W-04D01 M 7-16-69 5050 1030 5050	65	---	1360 1425										67 1.89	1.3				
04N/02W-05Q02 M 7-16-69 5050 1015 5050	67	---	1100 1225										112 3.16	0.6				
04N/02W-09H01 M 7-15-69 5050 0915 5050	65	---	3400 3500										1050 29.62	5.6				

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in					Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH	
SUISUN-FAIRFIELD VALLEY 2-03.00 (Continued)																		
04N/02W-18M01 M 7-16-69 5050 0830 5050	65	---	1030										106			0.7		
		7.4	1200										2.99					
04N/03W-13G02 M 7-16-69 5050 0900 5050	72	8.3	699	52	26	62	1.5	0	238	100	48	2.5			0.6	400	236	
		7.4	775	2.59	2.13	2.70	0.04		3.90	2.08	1.35	0.04					41	
				34	29	36	1		53	28	18	1						
05N/01W-25R01 M 7-16-69 5050 1600 5050	68	8.2	1710	113	36	180	0.8	0	243	13	432	13			0.9	968	432	
		7.3	1700	5.64	2.99	7.83	0.02		3.98	0.27	12.19	0.21					233	
				34	18	47	1		24	2	73	1						
05N/01W-28P01 M 7-16-69 5050 1700 5050	--	8.1	756	69	27	54	1.4	0	294	10	94	14			0.4	395	285	
		7.8	775	3.44	2.25	2.35	0.04		4.82	0.21	2.65	0.22					44	
				42	28	29	1		61	3	34	2						
05N/01W-30H01 M 7-22-69 5050 1430 5050	70	8.0	979	28	22	149	0.7	0	247	24	170	26			2.5	530	160	
		7.5	1190	1.40	1.80	6.48	0.02		4.05	0.50	4.80	0.42					0	
				14	18	67	1		41	5	49	5						
05N/01W-30J01 M 7-22-69 5050 1345 5050	68	8.0	2090	50	41	322	1.4	0	209	40	556	8.2			6.3	1540	296	
		7.3	2500	2.50	3.41	14.01	0.04		3.42	0.83	15.68	0.13					125	
				13	17	70	0		17	4	78	1						
05N/02W-21P03 M 7-15-69 5050 0745 5050	66	8.4	882	70	38	70	0.4	0	379	63	62	24			1.3	485	333	
		7.2	975	3.49	3.16	3.04	0.01		6.21	1.31	1.75	0.39					22	
				36	33	31	0		64	14	18	4						
05N/02W-34N01 M 7-22-69 5050 0845 5050	70	---	1540										101		5.5			
		7.5	1990										2.85					
05N/02W-34P04 M 7-16-69 5050 1730 5050	69	---	1120										40		1.6			
		7.6	1200										1.13					
PITTSBURG PLAIN 2-04.00																		
02N/01E-07R02 M 1-17-69 5050 1330 5050	68	8.1	3320	166	110	388	14	0	386	613	551	1.6			0.7	2000	867	
		8.0	3100	8.28	9.04	16.88	0.36		6.33	12.76	15.54	0.02					551	
				24	26	49	1		18	36	45	1						
02N/01E-18D01 M 8-04-69 5050 1515 5050	71	---	1020										134		22			
		7.8	1025										3.78		0.35			
02N/01W-09D01 M 8-08-69 5050 1345 5050	62	---	2830										653		12			
		7.6	2750										18.42		0.19			
02N/01W-12P02 M 8-04-69 5050 1550 5050	73	---	2260										436		0.6			
		7.9	2300										12.30		0.01			
CLAYTON VALLEY 2-05.00																		
01N/01W-04A01 M 7-31-69 5050 1315 5050	69	8.6	579	39	40	28	0.2	4	265	52	25	9.2			0.4	352	264	
		7.3	590	1.95	3.32	1.22	0	0.13	4.34	1.08	0.70	0.15					40	
				30	51	19	0	2	68	17	11	2						
02N/01W-30J01 M 7-31-69 5050 1400 5050	72	---	933										55					
		7.4	1050										1.55					
02N/01W-30K01 M 7-31-69 5050 1420 5050	--	---	1130										78		1.2			
		7.4	1300										2.20					
02N/01W-31D01 M 7-30-69 5050 1645 5050	--	---	1030										114		54			
		7.2	1050										3.22		0.87			
02N/02W-13P01 M 7-31-69 5050 1100 5050	67	8.6	965	39	36	109	1.2	1	262	56	142	17			0.3	541	246	
		7.4	990	1.95	2.97	4.74	0.03	0.03	4.29	1.16	4.00	0.27					28	
				20	31	49	0	0	44	12	41	3						
02N/02W-26B01 M 7-31-69 5050 1030 5050	65	---	953										130		1.2			
		7.9	1000										3.67					
02N/02W-36J01 M 7-31-69 5050 1230 5050	69	---	2650										400		174			
		7.1	1225										11.28		2.81			

TABLE E-1 (Cont.)

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
YGNACIO VALLEY 2-06.00																	
01N/01W-07K01 M 7-10-69 5050 1400 5050	--	7.9 7.3	1990 2400	60 2.99 14	67 5.50 26	289 12.57 60	1.9 0.05 0	0	251 4.11 20	560 11.66 55	175 4.94 23	21 0.34 2		1.1	1380	425 219	
01N/01W-29G01 M 7-30-69 5050 1450 5050	--	7.9 7.3	1880 2300	54 2.69 14	71 5.84 31	242 10.53 55	1.3 0.03 0	0	288 4.72 25	253 5.27 27	320 9.03 47	15 0.24 1		1.2	1150	427 191	
01N/02W-11N01 M 7-30-69 5050 1300 5050	--	---	1090 1300								92 2.60	38 0.61					
01N/02W-13P01 M 7-30-69 5050 1330 5050	65	---	1080 1325								136 3.84	2.3 0.04		1.1			
01N/02W-14Q01 M 8-11-69 5050 1830 5050	--	7.7 7.5	2240 2700	59 2.94 13	45 3.69 16	365 15.88 70	4.2 0.11 1	0	554 9.08 40	80 1.66 7	408 11.51 51	18 0.29 2		12	1320	332 0	
02N/02W-36E01 M 2-25-69 5050 1030 5050	--	7.8 ---	2530 ---	177 8.83 33	117 9.63 36	187 8.13 31	1.4 0.03 0	0	453 7.42 31	323 6.72 28	370 10.44 39	149 2.40 2		0.8	1570	924 553	
02N/02W-36E01 M 7-30-69 5050 1600 5050	--	---	1080 3000								90 1.87	130 3.67	39 0.63		0.4		
02N/02W-36E80 M 2-25-69 5050 1115 5050	--	7.5 ---	1200 ---	89 4.44 36	62 5.13 41	67 2.91 23	0.7 0.02 0	0	391 6.41 51	70 1.46 18	132 3.72 29	65 1.05 2		0.4	542	479 158	
02N/02W-36E81 M 2-26-69 5050 1500 5050	--	6.9 ---	594 ---	36 1.80 33	23 1.90 35	38 1.65 30	3.9 0.09 2	0	92 1.51 30	117 2.44 45	13 0.37 2	78 1.26 23		0.2	392	185 110	
02N/02W-36E82 M 3-03-69 5050 1030 5050	--	8.0 ---	1390 ---	97 4.84 33	72 5.93 40	92 4.00 26	5.4 0.12 1	0	480 7.87 53	86 1.79 13	174 4.91 33	11 0.10 1		0.9	825	539 30	
EAST BAY AREA BAY FLAIN 2-09.01																	
01S/04W-04A01 M 8-18-69 5050 5100	--	8.0 ---	1430 ---	88 4.39 28	60 4.94 33	130 5.66 38	1.3 0.03 1	0	317 5.20 35	122 2.54 17	244 6.88 46	23 0.37 2		0.1	884	467 207	
02S/03W-28G01 M 8-19-69 5050 5100	--	---	820 ---								131 3.70						
02S/04W-12R01 M 8-19-69 5050 5100	--	8.0 ---	390 ---	20 1.00 29	8.5 0.70 19	44 1.91 51	3.8 0.10 1	0	141 2.31 65	3.4 0.07 2	42 1.18 33	0.2 0.00 0		0.1	182	85 0	
02S/04W-25A01 M 8-19-69 5050 5100	--	---	808 ---								89 2.51						
03S/02W-07J01 M 8-19-69 5050 5100	--	7.2 ---	855 ---	60 2.99 32	37 3.08 33	74 3.22 34	2.4 0.06 1	0	283 4.64 51	93 1.94 21	66 1.86 20	46 0.74 8		0.4	529	304 72	
03S/02W-32D02 M 8-19-69 5050 5100	--	8.6 ---	778 ---	36 1.80 22	9.5 0.78 10	125 5.44 67	2.7 0.07 1	4 0.13 2	266 4.36 54	54 1.12 14	85 2.40 30	0.1 0.00 0		0.5	473	129 0	
EAST BAY AREA ABOVE HAYWARD FAULT 2-09.01																	
04S/01W-07R05 M 7-09-69 5050 5401	--	---	1760 ---								412 11.62						
04S/01W-21P06 M 7-07-69 5050 5401	--	7.9 ---	570 ---	37 1.85 31	26 2.12 36	44 1.91 32	2.0 0.05 1	0	201 3.29 56	62 1.29 22	42 1.18 20	8.0 0.13 2		0.7	316	198 33	
04S/01W-34R02 M 7-01-69 5050 5401	--	---	585 ---								38 1.07						
EAST BAY AREA NEWARK AQUIFER 2-09.01																	
04S/01W-18C02 M 7-09-69 5050 5401	--	---	896 ---								86 2.43						

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in									Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
EAST BAY AREA NEWARK AQUIFER 2-09.01 (Continued)																	
04S/01W-19J07 M 7-01-69 5050 5401	--	8.2 ---	880 ---	62 3.09 34	46 3.80 45	46 2.00 20	2.9 0.07 1	0	147 2.41 29	68 1.42 17	155 4.37 52	15 0.24 2	0.5	456	320 199		
04S/01W-29J06 M 7-02-69 5050 5401	--	---	1680 ---								377 10.64						
04S/01W-33C01 M 7-10-69 5050 5401	--	7.4 ---	1420 ---	56 2.79 20	58 4.76 33	152 6.61 46	3.9 0.10 1	0	372 6.10 42	111 2.31 16	168 4.74 33	80 1.29 9	1.0	811	378 73		
04S/02W-21B03 M 6-04-68 5050 1100 5050	--	7.8 ---	42400 ---	2550 127.24 27	1490 122.51 26	5160 224.46 47	20 0.51 0	0	195 3.20 1	815 16.97 4	15900 448.54 95	0	0.3	29300	12500 12300		
04S/02W-21B03 M 7-09-69 5050 5401	--	7.1 ---	36400 ---	2240 111.78 25	1420 116.83 27	4850 211.06 48	30 0.77 0	0	88 1.44 1	883 18.39 4	15400 423.15 95	0.7 0.01 0	0.4	23800	11400 11300		
04S/02W-24F06 M 7-10-69 5050 5401	--	---	6800 ---								2190 61.78						
04S/02W-26E02 M 6-04-68 5050 1315 5050	--	8.5 ---	843 ---	60 2.99 36	14 1.17 14	93 4.04 49	3.6 0.09 1	9 0.30 4	313 5.13 62	50 1.04 13	60 1.69 20	5.0 0.08 1	0.3	471	208 0		
04S/02W-26G02 M 6-04-68 5050 5050	--	8.1 ---	2380 ---	160 7.98 34	91 7.48 31	182 7.92 34	4.4 0.11 1	0	394 6.46 27	292 6.08 26	374 10.55 45	33 0.53 2	0.5	1410	774 451		
04S/02W-34E01 M 6-03-68 5050 1730 5050	--	7.6 ---	22700 ---	1940 96.81 39	1180 97.00 39	1280 55.68 22	20 0.51 0	0	120 1.97 1	355 7.39 3	8460 238.66 96	0.0	0.4	16100	9700 9600		
04S/02W-34G01 M 6-03-68 5050 1845 5050	--	8.5 ---	2840 ---	79 3.94 14	74 6.11 22	413 17.96 64	5.0 0.13 0	15 0.47 2	502 8.23 29	319 6.64 23	458 12.92 46	0.3 0.00 0	1.3	1640	503 66		
04S/03W-13B03 M 7-08-69 5050 5401	--	---	36900 ---								14400 406.22						
05S/01W-07K01 M 7-07-69 5050 5401	--	7.2 ---	56000 ---	1520 75.85 10	1780 146.29 19	12200 531.40 70	73 1.87 1	0	357 5.85 1	2810 58.53 8	24500 691.14 91	0.3 0.00 0	1.7	42000	11200 10900		
05S/02W-02L01 M 5-28-68 5050 1900 5050	--	7.9 ---	46000 ---	1640 81.84 16	1370 112.96 22	7390 321.46 62	25 0.64 0	0	320 5.24 1	2130 44.35 9	16500 465.46 90	0.0	0.2	29800	9750 9490		
05S/02W-02L01 M 7-09-69 5050 5401	--	---	43900 ---								17400 490.85						
05S/02W-12C01 M 5-20-68 5050 1700 5050	--	7.9 ---	50400 ---	2440 121.76 21	1190 98.02 17	8500 369.75 62	25 0.64 0	0	311 5.10 1	1090 22.69 4	19700 555.74 95	0.0	0.2	35500	11000 10700		
05S/02W-14E01 M 7-08-69 5050 5401	--	---	59500 ---								24900 702.43						
05S/02W-17F02 M 7-08-69 5050 5401	--	---	34800 ---								13000 366.73						
EAST BAY AREA LOWER AQUIFER 2-09.01																	
04S/01W-07P02 M 7-07-69 5050 5401	--	7.8 ---	734 ---	37 1.85 25	37 3.01 41	58 2.52 34	2.0 0.05 0	0	184 3.02 43	64 1.33 18	62 1.75 24	69 1.11 15	0.3	414	243 92		
04S/01W-29L12 M 7-03-69 5050 5401	--	7.5 ---	2420 ---	213 10.63 46	109 8.93 39	74 3.22 14	3.7 0.09 1	0	70 1.15 5	58 1.21 5	726 20.48 89	8.6 0.14 1	0.4	1210	979 922		
04S/01W-30E03 M 7-02-69 5050 5401	--	7.6 ---	1710 ---	137 6.84 43	58 4.75 30	100 4.35 27	2.7 0.07 0	0	90 1.48 10	61 1.27 8	474 13.37 82	5.5 0.09 0	0.4	881	580 506		
04S/01W-31B03 M 7-03-69 5050 5401	--	---	3060 ---								911 25.70						
04S/02W-03R01 M 7-07-69 5050 5401	--	---	545 ---								19 0.54						

TABLE E-1 (Cont.)

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in									Milligrams per Liter				
				Milliequivalents per Liter									Percent Reactance Value				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
EAST BAY AREA LOWER AQUIFER 2-09.01 (Continued)																	
04S/02W-11Q10 M 7-07-69 5050 5401	--	---	591									48					
												1.35					
04S/02W-23F02 M 7-07-69 5050 5401	--	---	1240									232					
												6.54					
04S/02W-27L01 M 7-02-69 5050 5401	--	8.7	593	22	5.1	112	1.7	16	271	31	28	1.1	0.4		335	76	
		---	---	1.10	0.42	4.87	0.04	0.53	4.44	0.65	0.79	0.02				0	
				17	7	76	0	8	69	10	12	1					
04S/03W-13B01 M 7-08-69 5050 5401	--	---	867									103					
												2.90					
04S/03W-13B02 M 7-08-69 5050 5401	--	---	553									26					
												0.73					
05S/01W-04D01 M 7-01-69 5050 5401	--	---	575									24					
												0.68					
05S/01W-08A03 M 7-07-69 5050 5401	--	8.5	656	22	4.4	130	1.7	12	323	44	22	0.3	0.7		385	73	
		---	---	1.10	0.36	5.66	0.04	0.40	5.29	0.92	0.62	0.00				0	
				15	5	79	1	6	73	13	8	0					
05S/02W-01N01 M 7-09-69 5050 5401	--	8.3	426	5.3	1.7	100	0.9	7	202	34	14	0.2	0.3		250	20	
		---	---	0.26	0.14	4.35	0.02	0.23	3.31	0.71	0.39	0.00				0	
				5	3	91	1	5	71	15	9	0					
05S/02W-14E02 M 7-08-69 5050 5401	--	---	447									13					
												0.37					
05S/02W-14E03 M 7-08-69 5050 5401	--	8.1	431	25	6.4	68	1.7	0	227	25	16	0.2	0.2		250	89	
		---	---	1.25	0.53	2.96	0.04		3.72	0.52	0.45	0.00				0	
				26	11	62	1		79	12	9	0					
SOUTH BAY AREA 2-09.02																	
05S/01E-31R01 M 7-17-69 5050 1000 2400	--	---	997									82					
												2.31					
06S/01E-22P01 M 7-16-69 5050 0915 2400	--	---	707									62		1.1			
												1.75					
06S/01E-28A04 M 8-15-69 5050 0900 2400	--	8.3	640	56	14	68	2.2	5	241	54	48	14	0.6		336	197	
		---	---	2.79	1.15	2.96	0.06	0.17	3.95	1.12	1.33	0.23				0	
				40	17	42	1	2	58	16	21	3					
06S/01W-14E01 M 7-17-69 5050 1035 2400	--	7.9	541	30	20	53	1.7	0	146	58	65	0.2	0.1		308	159	
		---	---	1.50	1.68	2.31	0.04		2.39	1.21	1.83	0.00				39	
				27	30	42	1		44	22	34	0					
06S/01W-15N03 M 7-23-69 5050 1025 2400	--	---	442									18					
												0.51					
06S/01W-19C02 M 7-23-69 5050 1000 2400	--	---	555									30					
												0.85					
06S/01W-26D01 M 7-31-69 5050 1301 2400	--	---	453									14					
												0.39					
06S/01W-31E01 M 7-24-69 5050 1210 2400	--	---	567									26					
												0.73					
06S/02W-09Q02 M 7-28-69 5050 0920 2400	60	8.1	585	46	18	60	1.6	0	243	62	34	1.0	0.2		325	187	
		---	---	2.30	1.44	2.61	0.04		3.98	1.29	0.96	0.02				0	
				36	23	40	1		64	21	15	0					
06S/02W-29J02 M 8-26-69 5050 1250 2400	72	---	725									49	32	0.0			
		---	---									1.38	0.52				
06S/02W-34M01 M 7-28-69 5050 1110 2400	--	---	615									34					
												0.96					
07S/01E-20B80 M 7-10-69 5050 1015 2400	--	---	774									44	15	0.2			
												1.24	0.24				

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in										Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH	
SOUTH BAY AREA 2-09.02 (Continued)																		
07S/02E-18B01 M 7-10-69 5050 1040 2400	--	---	1020										74 2.09					
07S/02E-19E01 M 7-10-69 5050 0930 2400	--	8.2 ---	699 ---	32 1.60 21	40 3.26 42	66 2.87 37	0.8 0.02 0	0	305 5.00 66	50 1.04 14	43 1.21 16	23 0.37 4		0.2		377	243 0	
07S/02E-33C04 M 7-10-69 5050 0955 2400	--	---	878										86 2.43					
07S/01W-06B01 M 7-24-69 5050 1040 2400	--	---	519										52 1.47					
08S/01E-16D01 M 8-08-69 5050 1000 2400	--	8.2 ---	310 ---	22 1.10 34	15 1.26 39	20 0.87 27	1.7 0.04 0	0	144 2.36 73	25 0.52 16	11 0.31 10	2.7 0.04 1		0.2		193	118 0	
08S/01E-27C02 M 7-25-69 5050 0930 2400	--	---	714										21 0.59	28 0.45			0.3	
08S/02E-07F01 M 8-11-69 5050 2400	--	8.1 ---	530 ---	22 1.10 19	41 3.38 58	31 1.35 23	1.5 0.04 0	0	220 3.61 61	74 1.54 26	20 0.56 9	16 0.26 4		0.1		286	224 44	
08S/02E-16E01 M 8-11-69 5050 1150 2400	--	8.6 ---	503 ---	44 2.20 38	31 2.56 44	23 1.00 17	1.5 0.04 1	14 0.47 8	232 3.80 67	43 0.90 16	15 0.42 7	7.7 0.12 2		0.1		272	238 26	
08S/01W-15B01 M 8-12-69 5050 0900 2400	--	8.1 ---	279 ---	32 1.60 54	11 0.90 30	10 0.44 15	1.6 0.04 1	0	141 2.31 78	21 0.44 16	6.8 0.19 6	0.8 0.01 0		0.1		166	125 9	
09S/02E-02C01 M 8-11-69 5050 1100 2400	--	8.4 ---	733 ---	56 2.79 35	42 3.46 44	36 1.57 20	1.6 0.04 1	4 0.13 2	212 3.47 44	91 1.90 24	46 1.30 16	72 1.16 14		0.1		406	313 133	
09S/03E-36F03 M 8-11-69 5050 1140 2400	--	8.4 ---	387 ---	30 1.50 36	18 1.46 35	27 1.17 28	2.4 0.06 1	5 0.17 4	169 3.00 71	23 0.48 11	20 0.56 13	2.3 0.04 1		0.0		215	148 0	
LIVERMORE VALLEY 2-10.00																		
02S/02E-35G02 M 8-18-69 5050 5100	--	8.1 ---	3270 ---	54 2.69 8	64 5.24 16	551 23.97 75	2.9 0.07 1	0	291 4.77 15	78 1.62 5	846 23.86 76	84 1.35 4		6.6		1890	397 158	
03S/01E-08H03 M 8-18-69 5050 5100	--	8.2 ---	940 ---	49 2.44 25	60 4.91 49	58 2.52 25	1.5 0.04 1	0	334 5.47 56	64 1.33 14	100 2.82 27	18 0.29 3		0.8		542	368 94	
03S/01E-11H01 M 8-18-69 5050 5100	--	8.5 ---	861 ---	53 2.64 27	56 4.65 48	54 2.35 24	1.8 0.05 1	11 0.37 4	321 5.26 55	41 0.85 9	100 2.82 29	18 0.29 3		0.4		572	365 92	
03S/01E-15L01 M 8-18-69 5050 5100	--	8.4 ---	502 ---	40 2.00 39	24 1.98 39	26 1.13 22	1.2 0.03 0	0	190 3.11 61	40 0.83 16	36 1.02 20	10 0.16 3		0.1		275	199 43	
03S/02E-08H01 M 8-18-69 5050 5100	72	7.7 ---	721 ---	44 2.20 28	43 3.53 46	45 1.96 25	1.2 0.03 1	0	256 4.20 56	29 0.60 8	62 1.75 23	61 0.98 13		0.5		445	287 77	
03S/02E-29D01 M 8-18-69 5050 5100	--	8.1 ---	677 ---	59 2.94 39	27 2.21 30	52 2.26 30	1.5 0.04 1	0	272 4.46 61	51 1.06 15	49 1.38 19	24 0.39 5		0.3		390	258 35	
03S/03E-19C01 M 8-18-69 5050 5100	--	8.4 ---	1560 ---	36 1.80 11	43 3.53 21	263 11.44 68	2.8 0.07 0	14 0.47 3	505 8.28 49	99 2.06 12	220 6.21 36	0.5 0.01 0		6.5		940	267 0	
CENTRAL COASTAL REGION 3-00.00																		
PAJARO VALLEY 3-02.00																		
12S/02E-16J01 M 7-29-69 5050 5050	65	8.6	765	58 2.89 33	45 3.70 42	52 2.26 25		21 0.70	394 6.46		43 1.21	1.7 0.03		0.4			330 0	
12S/02E-29L01 M 8-13-69 5050 5050	67	8.5	576	42 2.09 34	28 2.31 38	39 1.70 28		7 0.23	251 4.11		30 0.85	3.9 0.06					220 2	
12S/03E-19M01 M 7-29-69 5050 5050	64	8.1	380	20 1.00 27	12 0.99 27	39 1.70 46		0	99 1.62		57 1.61	13 0.21					100 19	

TABLE E-1 (Cont.)

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
PAJARO VALLEY 3-02.00 (Continued)																	
13S/02E-01K01 M 7-30-69 5050 5050	68	8.0	265	14 0.70 28	7.9 0.65 26	27 1.17 46		0	74 1.21		32 0.90	20 0.32				68 7	
13S/02E-07R01 M 8-05-68 5050 1410 5050	76	8.3	976	27 1.35 14	9.5 0.78 8	173 7.52 78		0	255 4.18		128 3.61	1.3 0.02	0.0			107 0	
13S/02E-10J01 M 7-30-69 5050 5050	72	8.4	559	28 1.40 25	16 1.35 25	64 2.78 50		5 0.17	152 2.49		97 2.73	4.2 0.07				138 5	
13S/03E-04L01 M 7-30-69 5050 5050	65	8.2	280	12 0.60 22	9.1 0.75 27	32 1.39 51		0	91 1.49		39 1.10	7.8 0.12				68 0	
SALINAS VALLEY 3-04.00																	
13S/02E-31K02 M 8-07-69 5050 1410 5050	--	8.3	648	45 2.24 34	16 1.35 21	68 2.96 45		0	228 3.74		82 2.31	2.4 0.04	0.0			180 0	
13S/02E-32A02 M 8-13-69 5050 1135 5050	63	8.4	533	15 0.75 14	20 1.64 31	65 2.83 54	2 0.05 1	1 0.03 1	173 2.83 54	16 0.33 6	72 2.03 39	0.2 0.00 0	0.1		307 277	121 0	
13S/03E-20B02 M 7-30-69 5050 5050	65	7.9	277	14 0.70 27	6.9 0.57 22	30 1.30 51		0	81 1.33		42 1.18	6.6 0.11				64 0	
14S/01E-25K01 M 8-12-69 5050 1105 5050	63	7.1	674	29 1.45 25	17 1.38 24	67 2.91 51		0	33 0.54		157 4.43	34 0.55	0.1			142 115	
14S/02E-08M02 M 8-06-69 5050 0900 5050	72	8.3	483	31 1.55 31	14 1.12 23	52 2.26 46		0	193 3.16		45 1.27	2.6 0.04	0.0			134 0	
14S/02E-12Q01 M 8-12-69 5050 1110 5050	67	8.2	547	60 2.99 51	17 1.40 24	33 1.43 25		0	244 4.00		40 1.13	8.5 0.14	0.0			220 20	
14S/02E-13P01 M 8-12-69 5050 1040 5050	67	7.9	1180	86 4.29 36	48 3.95 33	80 3.48 29	4 0.10 1	0	280 4.59 38	141 2.93 24	158 4.45 37	10 0.16 1	0.1		815 665	414 184	
14S/02E-33H01 M 8-12-69 5050 5050	61	8.2	968	57 2.84 27	51 4.19 40	77 3.35 32	4 0.10 1	0	272 4.46 42	163 3.39 32	75 2.11 20	33 0.53 5	0.3		581 594	354 131	
14S/02E-36G01 M 8-05-69 5050 1600 5050	70	8.3	422	28 1.40 38	13 1.07 29	26 1.13 31	2 0.05 1	0	104 1.70 46	78 1.62 44	14 0.39 11	0.1 0.00 0	0.1		253 213	123 38	
14S/03E-04E01 M 8-13-69 5050 1340 5050	68	7.8	495	51 2.54 51	15 1.23 25	28 1.22 24	1 0.02 0	0	218 3.57 70	6 0.12 2	43 1.21 24	11 0.18 3	0.0		251 263	189 10	
14S/03E-25L02 M 8-05-69 5050 1225 5050	70	8.3	604	31 1.55 27	23 1.89 32	54 2.35 40	1 0.02 0	0	214 3.51 60	8 0.17 3	78 2.20 37	0.5 0.01 0	0.0		274 301	174 0	
14S/03E-31F01 M 8-06-69 5050 0835 5050	60	7.5	2310	165 8.23 34	91 7.48 31	193 8.39 34	8 0.20 1	0	204 3.34 14	553 11.51 47	336 9.47 39	14 0.22 1	0.5		1840 1461	786 619	
15S/01E-26N02 M 8-12-69 5050 5050	70	8.2	976	46 2.29 26	22 1.82 20	112 4.87 54		0	133 2.18		200 5.64	10 0.16				206 97	
15S/02E-24J01 M 8-01-69 5050 5050	64	8.0	704	40 1.99 30	18 1.48 22	71 3.09 46	3 0.08 1	0	126 2.06 32	30 0.62 10	99 2.79 43	65 1.05 16	0.0		458 388	176 73	
15S/03E-13N01 M 8-14-69 5050 1130 5050	66	7.8	923	72 3.59 37	38 3.12 32	69 3.00 31	3 0.08 1	0	280 4.59 46	172 3.58 36	62 1.75 17	2.6 0.04 0	0.2		602 557	336 106	
15S/04E-26G01 M 8-07-69 5050 1345 5050	67	7.8	461	36 1.80 39	16 1.31 28	34 1.48 32	2 0.05 1	0	182 2.98 65	6 0.12 3	42 1.18 26	16 0.26 6	0.0		259 242	155 6	
16S/02E-01L01 M 7-30-69 5050 5050	--	8.1	517	24 1.20 25	10 0.83 17	63 2.74 58		0	111 1.82		72 2.03	6.4 0.10				102 11	
16S/02E-02D03 M 7-30-69 5050 5050	--	8.2	836	46 2.29 28	18 1.52 19	100 4.35 53		0	201 3.29		168 4.74	3.8 0.06				191 26	

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
SALINAS VALLEY 3-04.00																	
16S/02E-05L02 M 8-12-69 5050 5050	61	7.5	2720	46 2.29 9	65 5.34 21	411 17.88 70	6 0.15 1	0	140 2.29 9	0	816 23.01 91	4.5 0.07 0	0.1	1420 1418	382 267		
16S/03E-19L02 M 7-31-69 5050 5050	--	8.0	1480	174 8.68 54	36 2.96 18	99 4.31 27	10 0.25 2	0	340 5.57 34	295 6.14 37	165 4.65 28	1.3 0.02 0	0.0	965 948	584 305		
16S/04E-03Q01 M 8-07-69 5050 0900 5050	60	7.7	1710	128 6.39 34	65 5.34 29	155 6.74 36	6 0.15 1	0	242 3.97 21	471 9.81 52	174 4.91 26	0.9 0.01 0	0.4	1240 1120	587 388		
16S/05E-17P01 M 8-07-69 5050 1040 5050	69	8.2	1250	80 3.99 35	35 2.88 25	105 4.57 40	4 0.10 1	0	211 3.46 30	55 1.14 10	223 6.29 54	44 0.71 6	0.1	810 650	345 172		
17S/05E-10Q01 M 8-05-69 5050 1545 5050	67	8.1	645	64 3.19 45	24 1.97 28	43 1.87 26	2 0.05 1	0	219 3.59 51	115 2.39 34	34 0.96 14	1.5 0.02 0	0.2	377 392	259 79		
17S/06E-07Q01 M 8-06-69 5050 1610 5050	73	8.2	664	62 3.09 45	20 1.64 24	50 2.17 31		0	181 2.97		50 1.41	5.3 0.08	0.1		237 88		
17S/06E-35F01 M 8-13-69 5050 1420 5050	65	8.2	988	59 2.94 28	35 2.85 28	106 4.61 44		0	220 3.60		71 2.00	2.4 0.04	0.6		290 110		
18S/06E-28J01 M 8-05-69 5050 1740 5050	63	7.9	568	70 3.49 61	15 1.26 22	22 0.96 17		0	158 2.59		36 1.01	19 0.31	0.0		238 108		
18S/07E-20K01 M 8-13-69 5050 1310 5050	65	7.7	2940	332 16.57 46	153 12.58 35	160 6.96 19	6 0.15 0	0	254 4.16 12	1110 23.11 65	292 8.23 23	18 0.29 1	0.8	2820 2197	1460 1252		
19S/07E-10P01 M 8-07-69 5050 1405 5050	65	8.1	1650	148 7.38 43	81 6.66 38	74 3.22 19		0	259 4.24		285 8.04	51 0.82	0.1		703 491		
19S/08E-33R01 M 8-07-69 5050 1220 5050	65	8.0	3010	122 6.09 17	133 10.94 31	403 17.53 50	8 0.20 1	0	312 5.11 15	1020 21.24 61	285 8.04 23	32 0.52 1	1.8	2300 2159	854 598		
20S/08E-05R01 M 8-06-69 5050 1345 5050	65	7.8	1470	68 3.39 23	51 4.19 28	167 7.26 48	5 0.13 1	0	160 2.62 17	389 8.10 53	152 4.29 28	13 0.21 1	1.0	1050 925	380 249		
20S/08E-17P01 M 8-07-69 5050 1030 5050	65	7.9	1070	80 3.99 36	43 3.54 32	82 3.57 32	1 0.02 0	0	434 7.11 64	76 1.58 14	76 2.14 19	21 0.34 3	0.3	759 593	378 22		
20S/08E-28Q01 M 7-24-69 5050 5050	--	8.4	777	66 3.29 43	25 2.06 27	54 2.35 30		8 0.27	145 2.38		99 2.79	19 0.31	0.3		268 136		
20S/08E-29F01 M 7-24-69 5050 5050	--	8.5	3770	227 11.33 26	205 16.84 38	361 15.70 36		34 1.13	513 8.41		624 17.60	7.8 0.12	0.9		1410 932		
20S/08E-29P01 M 7-24-69 5050 5050	--	8.0	2790	150 7.48 23	141 11.58 35	316 13.75 42		0	468 7.67		304 8.57	2.2 0.03	0.6		954 570		
20S/08E-33R01 M 7-24-69 5050 5050	--	8.4	857	58 2.89 35	25 2.04 24	79 3.44 41		3 0.10	155 2.54		121 3.41	17 0.27	0.2		247 115		
20S/08E-34M01 M 7-24-69 5050 5050	--	8.4	594	35 1.75 31	18 1.50 27	54 2.35 42		3 0.10	102 1.67		90 2.54	25 0.40	0.2		163 74		
21S/08E-03B01 M 8-07-69 5050 1115 5050	--	7.9	940	60 2.99 32	28 2.30 24	94 4.09 43	3 0.08 1	0	177 2.90 31	148 3.08 33	110 3.10 33	21 0.34 4	0.4	605 552	267 122		
21S/08E-04C01 M 7-24-69 5050 5050	--	8.4	1290	102 5.09 37	45 3.72 27	116 5.05 36		10 0.33	222 3.64		166 4.68	0.4 0.01	0.2		441 242		
21S/08E-05F03 M 7-24-69 5050 5050	--	8.2	2190	175 8.73 31	124 10.21 37	203 8.83 32		0	541 8.87		96 2.71	10 0.16	0.2		948 504		
21S/08E-05P01 M 7-24-69 5050 5050	--	8.0	1670	105 5.24 27	89 7.30 38	158 6.87 35		0	467 7.65		56 1.58	17 0.27	0.1		628 245		
21S/08E-05P02 M 7-24-69 5050 5050	--	8.1	1750	125 6.24 31	89 7.30 36	155 6.74 33		0	463 7.59		78 2.20	36 0.58	0.1		678 298		

TABLE E-1 (Cont.)

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in								Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter		
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH		
SALINAS VALLEY 3-04.00																			
21S/08E-08C02 M 7-24-69 5050 5050	--	8.3	1440	111 5.54 32	74 6.07 36	124 5.39 32		0	488 8.00		48 1.35	39 0.63		0.2			581 181		
21S/09E-07J01 M 8-06-69 5050 1345 5050	65	8.0	2080	174 8.68 39	78 6.41 29	155 6.74 31	5 0.13 1	0	196 3.21 15	622 12.95 60	170 4.79 22	43 0.69 3		0.2		1590 1344	755 594		
21S/09E-24L01 M 8-06-69 5050 1250 5050	65	8.0	1930	184 9.18 39	87 7.16 30	166 7.22 31		0	294 4.82		104 2.93	37 0.60		0.5			818 577		
22S/10E-34G01 M 8-06-69 5050 1135 5050	67	8.1	786	38 1.90 25	31 2.55 33	71 3.09 41	3 0.08 1	0	190 3.11 40	110 2.29 29	84 2.37 30	2.6 0.04 0		0.5		458 434	224 68		
23S/08E-04C01 M 8-13-69 5050 5050	71	7.9	349	31 1.55 43	13 1.07 29	22 0.96 26	2 0.05 1	0	144 2.36 66	23 0.48 13	21 0.59 17	9.0 0.14 4		0.0		194 192	130 12		
23S/09E-18N01 M 8-13-69 5050 5050	70	8.2	591	51 2.54 43	26 2.14 36	26 1.13 19	4 0.10 2	0	146 2.39 40	48 1.00 17	74 2.09 35	28 0.45 8		0.0		373 329	232 112		
CARMEL VALLEY 3-07.00																			
16S/01E-17J01 M 1-15-69 5050 5050	--	7.5	831	65 3.24 38	32 2.65 31	58 2.52 30	4 0.10 1	0	229 3.75		74 2.09	0.2 0.00		0.1			295 107		
16S/01E-17J02 M 1-15-69 5050 5050	--	7.6	1160	111 5.54 46	37 3.05 26	75 3.26 27	6 0.15 1	0	252 4.13		100 2.82	0.0		0.1			430 223		
16S/01E-17J02 M 4-23-69 5050 5050	--	7.9	1180	128 6.39 51	29 2.38 19	84 3.65 29	4 0.10 1	0	271 4.44 36	241 5.02 41	103 2.90 23	0.2 0.00 0		0.1		803 723	439 217		
16S/01E-18E01 M 1-16-69 5050 5050	--	7.6	920	75 3.74 40	33 2.69 29	66 2.87 30	5 0.13 1	0	257 4.21		83 2.34	0.5 0.01		0.0			322 111		
16S/01E-18E01 M 4-23-69 5050 5050	--	7.9	932	92 4.59 48	27 2.22 23	62 2.70 28	5 0.13 1	0	256 4.19 44	139 2.89 30	85 2.40 25	0.9 0.01 0		0.0		593 537	343 133		
16S/01E-18E02 M 1-15-69 5050 5050	--	6.9	575	46 2.29 41	20 1.64 30	34 1.48 27	4 0.10 2	0	120 1.97		40 1.13	0.0		0.0			197 99		
16S/01E-21A03 M 4-23-69 5050 5050	--	7.8	1560	156 7.78 46	47 3.86 23	121 5.26 31	5 0.13 1	0	221 3.62 21	464 9.66 57	128 3.61 21	2.3 0.04 0		0.2		1130 1033	584 403		
16S/01E-21G01 M 1-16-69 5050 5050	--	7.6	846	80 3.99 45	27 2.20 25	58 2.52 29	4 0.10 1	0	224 3.67		56 1.58	1.7 0.03		0.6	0.1		310 126		
16S/01E-21G02 M 1-16-69 5050 5050	--	7.8	903	113 5.64 58	14 1.19 12	64 2.78 29	4 0.10 1	0	266 4.36		64 1.80	0.2 0.00		0.4	0.0		342 124		
16S/01E-21J01 M 1-16-69 5050 5050	--	7.4	617	52 2.59 42	21 1.70 28	40 1.74 29	3 0.08 1	0	150 2.46		46 1.30	0.0		0.3	0.0		215 92		
16S/01E-21J01 M 1-16-69 5050 5050	--	7.6	644	57 2.84 45	20 1.67 26	41 1.78 28	3 0.08 1	0	164 2.69		42 1.18	0.0		0.0			226 91		
16S/01E-22C02 M 1-16-69 5050 5050	--	7.4	827	79 3.94 46	35 2.89 33	40 1.74 20	4 0.10 1	0	122 2.00		48 1.35	0.0		0.3	0.0		342 242		
16S/01E-22C02 M 4-22-69 5050 5050	--	7.9	769	82 4.09 52	26 2.14 27	36 1.57 20	4 0.10 1	0	125 2.05 26	216 4.50 58	42 1.18 15	0.2 0.00 0		0.0		516 468	313 210		
16S/01E-22F01 M 1-16-69 5050 5050	--	7.4	918	56 2.79 32	30 2.46 28	76 3.31 38	5 0.13 2	0	121 1.98		138 3.89	0.3 0.00		0.3	0.0		263 164		
16S/01E-22F01 M 4-22-69 5050 5050	--	7.8	515	47 2.34 46	17 1.40 27	30 1.30 25	3 0.08 1	0	127 2.08 41	104 2.16 43	28 0.79 16	0.2 0.00 0		0.0		319 292	188 84		
16S/01E-22F03 M 1-16-69 5050 5050	--	7.6	692	44 2.19 33	18 1.52 23	67 2.91 43	4 0.10 1	0	139 2.28		68 1.92	0.1 0.00		0.3	0.0		186 72		

MINERAL ANALYSES OF GROUND WATER

State Well Number Date Lab Time Sampler	Temp.	pH Lab Field	EC Lab Field	Mineral Constituents in				Milligrams per Liter Milliequivalents per Liter Percent Reactance Value					Milligrams per Liter				
				Ca	Mg	Na	K	CO ₃	HCO ₃	SO ₄	Cl	NO ₃	F	B	SiO ₂	TDS SUM	TH NCH
CARMEL VALLEY 3-07.00																	
16S/01E-22F03 M 4-22-69 5050 5050	--	7.8	534	52 2.59 48	17 1.40 26	30 1.30 24	3 0.08 1	0	127 2.08 40	114 2.37 45	28 0.79 15	0.1 0.00 0	0.0		323 307	201 97	
16S/01E-23E01 M 1-16-69 5050 5050	--	7.4	1020	81 4.04 38	34 2.79 27	82 3.57 34	5 0.13 1	0	242 3.97		93 2.62	0.0	0.6	0.1		342 143	
16S/01E-23E01 M 4-22-69 5050 5050	--	7.5	1030	89 4.44 41	28 2.30 21	91 3.96 37	4 0.10 1	0	243 3.98 37	206 4.29 40	87 2.45 23	0.1 0.00 0	0.1		682 625	339 140	
16S/01E-23J02 M 1-16-69 5050 5050	--	7.1	686	63 3.14 46	21 1.71 25	43 1.87 27	4 0.10 2	0	114 1.87		40 1.13	0.0	0.0			243 149	
16S/01E-23L01 M 1-16-69 5050 5050	--	7.4	1240	134 6.69 46	58 4.76 33	67 2.91 20	6 0.15 1	0	138 2.26		76 2.14	0.3 0.00	0.3	0.0		573 460	
16S/01E-23L01 M 4-22-69 5050 5050	--	7.6	493	51 2.54 52	16 1.31 27	22 0.96 19	3 0.08 2	0	97 1.59 33	132 2.75 57	14 0.39 8	4.2 0.07 1	0.0		327 290	194 114	
16S/02E-29Q01 M 1-16-69 5050 5050	--	7.3	661	48 2.39 37	11 0.94 14	71 3.09 48	3 0.08 1	0	144 2.36		40 1.13	0.0	0.2			167 49	
16S/02E-29Q01 M 4-22-69 5050 5050	--	7.8	720	64 3.19 45	10 0.82 12	70 3.04 43	2 0.05 1	0	179 2.93 41	151 3.14 44	37 1.04 15	0.0	0.2		466 423	202 55	
16S/02E-33F01 M 4-22-69 5050 5050	--	8.0	869	95 4.74 53	23 1.89 21	51 2.22 25	3 0.08 1	0	264 4.33 49	114 2.37 27	72 2.03 23	10 0.16 2	0.0		559 498	332 115	
16S/02E-33G01 M 1-16-69 5050 1655 5050	--	7.1	817	76 3.79 45	31 2.52 30	47 2.04 24	4 0.10 1	0	279 4.57		68 1.92	1.2 0.02	0.0			316 87	
16S/02E-33K01 M 1-16-69 5050 1610 5050	55	7.5	918	88 4.39 46	24 1.94 20	71 3.09 33	4 0.10 1	0	309 5.06		74 2.09	0.5 0.01	0.1			317 64	
16S/02E-33Q01 M 1-16-69 5050 1635 5050	52	8.1	612	51 2.54 40	19 1.53 24	50 2.17 34	4 0.10 2	0	240 3.93		35 0.99	2.0 0.03	0.0			204 7	
16S/02E-33Q01 M 4-22-69 5050 5050	--	7.9	464	48 2.39 51	16 1.31 28	21 0.91 19	2 0.05 1	0	168 2.75 60	50 1.04 23	27 0.76 17	1.6 0.02 1	0.0		270 249	185 47	
16S/02E-35AS1 M 1-16-69 5050 1515 5050	49	8.3	859	78 3.89 44	21 1.74 20	68 2.96 34	6 0.15 2	0	302 4.95		94 2.65	1.4 0.02	0.0			282 34	
16S/01W-13L02 M 4-23-69 5050 5050	--	8.0	888	79 3.94 44	25 2.05 23	66 2.87 32	3 0.08 1	0	246 4.03 45	90 1.87 21	106 2.99 33	1.3 0.02 0	0.0		539 492	300 98	
17S/02E-02J01 M 1-15-69 5050 1610 5050	57	7.4	2900	302 15.07 46	79 6.51 20	258 11.22 34	5 0.13 0	0	462 7.57		355 10.01	0.2 0.00	0.2			1080 701	
17S/02E-02J01 M 4-22-69 5050 5050	--	7.4	3020	334 16.67 48	79 6.50 19	258 11.22 32	4 0.10 0	0	478 7.83 22	783 16.30 47	381 10.74 31	0.1 0.00 0	0.2		2190 2075	1160 768	
17S/02E-03F01 M 1-16-69 5050 5050	--	7.9	994	86 4.29 42	33 2.71 26	72 3.13 30	5 0.13 1	0	313 5.13		99 2.79	0.0	0.0		---	350 93	
17S/02E-03F01 M 4-22-69 5050 5050	--	8.0	849	86 4.29 51	24 1.97 23	49 2.13 25	3 0.08 1	0	248 4.06 49	106 2.21 26	67 1.89 23	11 0.18 2	0.0		566 468	313 110	
17S/02E-11R01 M 1-16-69 5050 1250 5050	59	7.4	357	35 1.75 50	12 0.98 28	16 0.70 20	3 0.08 2	0	138 2.26		15 0.42	1.4 0.02	0.0			137 24	
17S/03E-20C01 M 1-16-69 5050 0945 5050	49	7.9	1330	121 6.04 43	41 3.39 24	103 4.48 32	6 0.15 1	0	403 6.60		127 3.58	3.8 0.06	0.0			472 141	
17S/03E-21B01 M 1-16-69 5050 1115 5050	--	7.9	1130	123 6.14 52	24 1.95 16	86 3.74 31	5 0.13 1	0	391 6.41		106 2.99	0.0	0.0			405 84	
17S/03E-21H02 M 1-16-69 5050 1115 5050	49	7.4	1200	105 5.24 40	45 3.73 28	92 4.00 31	5 0.13 1	0	369 6.05		110 3.10	0.0	0.0			449 146	

TABLE E-2

TRACE ELEMENT ANALYSES OF GROUND WATER

(In milligrams per liter)

State Well Number	Date Sampled	Arsenic	Cadmium	Copper	Iron	Lead	Manganese	Selenium	Zinc
NORTH COASTAL REGION 1-00.00									
ANDERSON VALLEY 1-19.00									
14N/14W-34G06M	09-12-69	0.00	0.00	0.00	0.06	0.01	0.00	0.00	0.13
POINT ARENA 1-20.00									
12N/17W-12L01M	09-11-69	0.00	0.00	0.01	0.13	0.00	0.00	0.00	0.99
13N/16W-31M01M	09-11-69	0.00	0.00	0.03	0.04	0.01	0.00	0.00	0.12
FORT BRAGG TERRACE 1-21.00									
17N/17W-30F01M	09-11-69	0.00	0.00	0.03	0.01	0.00	0.02	0.00	0.08
19N/17W-30Q01M	09-11-69	0.00	0.00	0.01	0.13	0.00	0.00	0.00	0.14
CENTRAL COASTAL REGION 3-00.00									
CARMEL VALLEY 3-07.00									
16S/01E-17J01M	01-15-69				5.7		0.06		
16S/01E-17J02M	01-15-69				8.9		0.18		
16S/01E-18E01M	01-16-69 04-23-69				3.6		0.19		
16S/01E-18E02M	01-15-69						0.07		
16S/01E-21G01M	01-16-69	0.00					0.21		
16S/01E-21G02M	01-16-69	0.00					0.08		
16S/01E-21J01M	01-16-69	0.00					0.13		
16S/01E 22C02M	01-16-69	0.00					0.35		
16S/01E-22F01M	01-16-69 04-22-69	0.00			2.3		0.36		
16S/01E-22F03M	01-16-69	0.00					0.14		
16S/01E-23E01M	01-16-69	0.00					0.33		
16S/01E-23J02M	01-16-69						0.28		
16S/01E-23L01M	01-16-69	0.00					0.20		
16S/02E-29Q01M	01-16-69 04-22-69				2.1		0.00		
16S/02E-33F01M	04-22-69				0.01				
16S/02E-33G01M	01-16-69						0.00		
16S/02E-33K01M	01-16-69						0.15		
16S/02E-33Q01M	01-16-69						0.00		
16S/02E-35AS1M	01-16-69						0.00		
17S/02E-02J01M	01-15-69						0.00		
17S/02E-03F01M	01-16-69 04-22-69				0.01		0.00		
17S/02E-11R01M	01-16-69						0.00		
17S/03E-20C01M	01-16-69						0.14		
17S/03E-21B01M	01-16-69						0.00		
17S/03E-21H02M	01-16-69						0.04		

TABLE E-3

MISCELLANEOUS CONSTITUENTS IN GROUND WATER

State Well Number	Date	Constituents in Milligrams per Liter	
		Ortho Phosphate	Total Phosphate
CENTRAL COASTAL REGION 3-00.00			
CARMEL VALLEY 3-07.00			
16S/01E-17J02M	04-23-69	0.03	0.04
16S/01E-18E01M	04-23-69	0.03	0.15
16S/01E-21A03M	04-23-69	0.03	0.13
16S/01E-22C02M	04-23-69	0.01	0.04
16S/01E-22F01M	04-22-69	0.06	0.18
16S/01E-22F03M	04-22-69	0.02	0.07
16S/01E-23E01M	04-22-69	0.02	0.02
16S/01E-23L01M	04-22-69	0.05	0.12
16S/02E-29Q01M	04-22-69	0.02	0.21
16S/02E-33F01M	04-22-69	0.05	0.06
16S/02E-33Q01M	04-22-69	0.02	0.04
16S/01W-13L02M	04-23-69	0.17	0.19
17S/02E-02J01M	04-22-69	0.02	0.03
17S/02E-03F01M	04-22-69	0.03	0.04

Appendix F

WASTE WATER

INTRODUCTION

This appendix contains data on the quality, quantity, and use of waste water by 67 dischargers in the Central Coastal Area. Data are presented for the period October 1, 1968, through September 30, 1969.

All data are analyzed by the Department of Water Resources unless otherwise indicated.

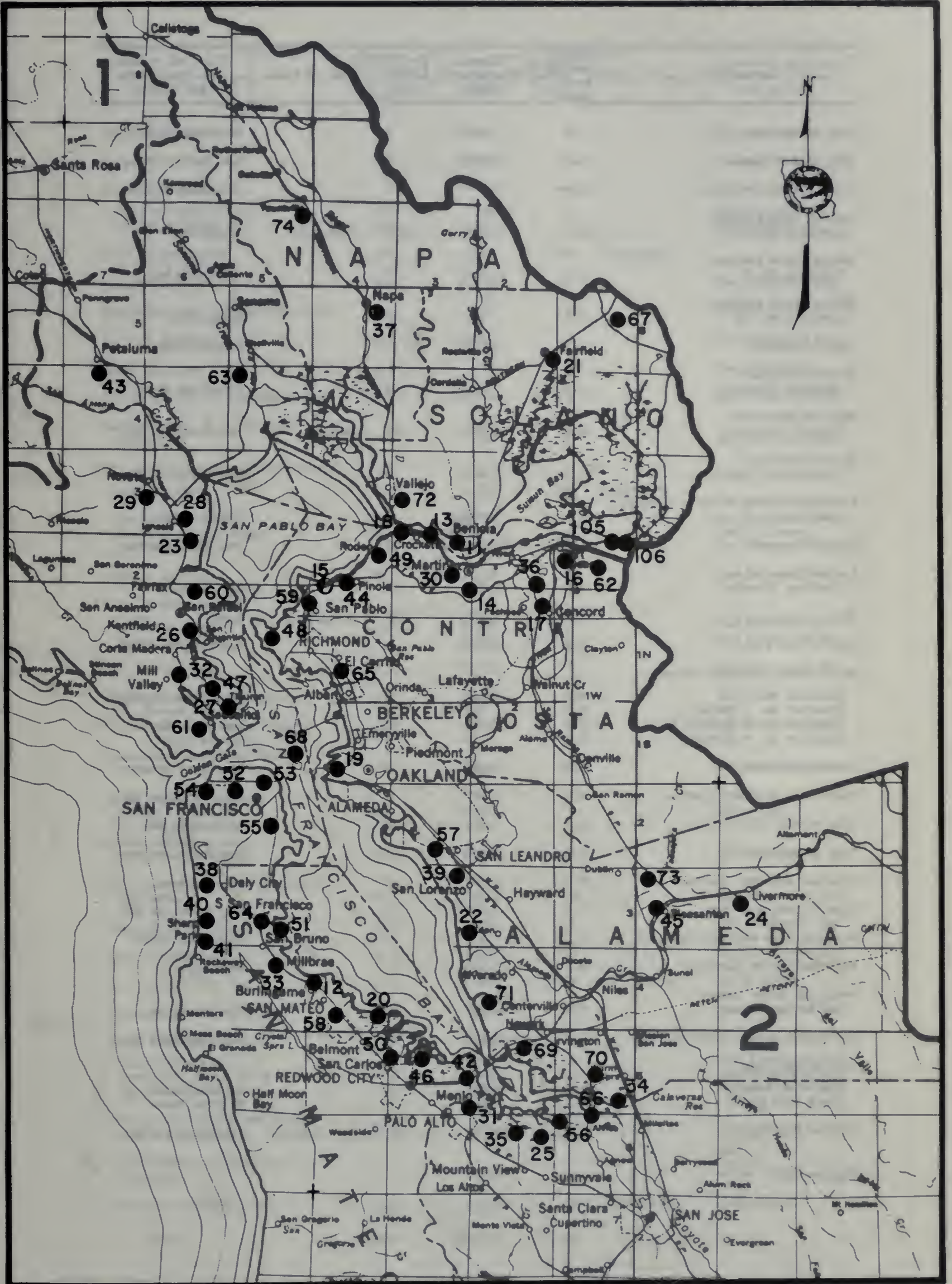
All dischargers are located in the California Regional Water Quality Control Board San Francisco Bay Region. Data collection was discontinued for the North Coast and Central Coast Regions.

The 67 dischargers released 634,196 acre-feet of waste water. Of this total, 62 dischargers released 622,660 acre-feet into a saline water body, and 11,530 acre-feet were released by 5 dischargers onto land or a watercourse. Eight dischargers reused 6,020 acre-feet of waste water for irrigation, cooling, and fire control.

FIGURE F-1

LOCATION OF WASTE DISCHARGERS
CENTRAL COASTAL AREA

<u>Number</u>	<u>Discharger</u>	<u>Number</u>	<u>Discharger</u>
11	City of Benicia	106	City of Pittsburg, Montezuma Plant
12	City of Burlingame	45	City of Pleasanton
13	C and H Sugar Refinery	46	City of Redwood City
14	Central Contra Costa Sanitary District	47	Richardson Bay Sanitary District
15	Contra Costa Sanitary District No. 3	48	City of Richmond
16	Contra Costa Sanitary District No. 7A	49	Rodeo Sanitary District
17	City of Concord	50	Cities of San Carlos-Belmont
18	Crockett-Valona Sanitary District	51	San Francisco International Airport
19	East Bay Municipal Utility District	52	City and County of San Francisco, McQueen Plant
20	Estero Municipal Improvement District	53	City and County of San Francisco, North Point Plant
21	Fairfield-Suisun Sanitary District	54	City and County of San Francisco, Richmond-Sunset Plant
22	City of Hayward	55	City and County of San Francisco, Southeast Plant
23	Las Gallinas Valley Sanitary District	56	City of San Jose
24	City of Livermore	57	City of San Leandro, Domestic and Industrial
25	City of Los Altos	58	City of San Mateo
26	Marin County Sanitary District No. 1	59	San Pablo Sanitary District
27	Marin County Sanitary District No. 5 (Main)	60	San Rafael Sanitation District
28	Marin County Sanitary District No. 6 (Ignacio)	61	Sausalito-Marín City Sanitary District
29	Marin County Sanitary District No. 6 (Novato)	62	Shell Chemical Company, Pittsburg Plant
30	City of Martinez	63	Sonoma Valley County Sanitation District
31	Menlo Park Sanitary District	64	Cities of South San Francisco-San Bruno
32	City of Mill Valley	65	Stege Sanitary District
33	City of Millbrae	66	City of Sunnyvale
34	Milpitas Sanitary District	67	Travis Air Force Base
35	City of Mountain View	68	Treasure Island, U. S. N.
36	Mountain View Sanitary District	69	Union Sanitary District, Newark Plant No. 1
37	Napa Sanitation District	70	Union Sanitary District Irvington Plant No. 2
38	North San Mateo County Sanitation District	71	Union Sanitary District, Alvarado Plant No. 3
39	Oro Loma Sanitary District	72	Vallejo Sanitation and Flood Control District
40	City of Pacifica, Sharp Park Plant	73	Valley Community Services District
41	City of Pacifica, Linda Mar Plant	74	Yountville Veterans Home
42	City of Palo Alto		
43	City of Petaluma		
44	City of Pinole		
105	City of Pittsburg, Camp Stoneman Plant		



QUANTITY OF WASTE WATER DISCHARGED AND REUSED

CENTRAL COASTAL AREA

1969 WATER YEAR

Discharger	Average Discharge Rate (Mgd)	Volume Discharged (AF)	Portion Reused (AF)	Type of Reuse	Place of Disposal For Waste Water Not Reused
City of Benicia	0.7	780	0		Carquinez Strait
City of Burlingame	4.9	5,490	0		San Francisco Bay
C and H Sugar Refinery	44.4*	49,730	0		Carquinez Strait
Central Contra Costa Sanitary District	23.1	25,870	1,090	Irrigation	Suisun Bay
Contra Costa Sanitary District No. 3	1.0	1,120	0		San Pablo Bay
Contra Costa Sanitary District No. 7A	0.8	900	0		Suisun Bay
City of Concord	4.7	5,260	0		Walnut Creek
Crockett-Valona Sanitary District	0.2	220	0		Carquinez Strait
East Bay Municipal Utility District	85.6	95,870	790	Cooling	San Francisco Bay
Estero Municipal Improvement District	1.3	1,460	0		San Francisco Bay
Fairfield-Suisun Sewer District	3.9	4,370	0		Suisun Slough
City of Hayward	11.8	13,200	0		San Francisco Bay
Las Gallinas Valley Sanitary District	2.9	3,250	0		Miller Creek
City of Livermore	3.5	3,920	670	Irrigation	Land
City of Los Altos	1.8	2,020	0		San Francisco Bay
Marin County Sanitary District					
District No. 1	6.0	6,720	0		San Francisco Bay
District No. 5 (Main)	0.6	670	0		Raccoon Strait
District No. 6 (Ignacio)	< 0.1	30	0		San Pablo Bay
District No. 6 (Novato)	0.1	110	0		Novato Creek
City of Martinez	1.5	1,680	0		Carquinez Strait
Menlo Park Sanitary District	5.4	6,050	0		San Francisco Bay
City of Mill Valley	2.3	2,580	0		Richardson Bay
City of Millbrae	2.3	2,580	0		San Francisco Bay
Milpitas Sanitary District	2.8	3,140	0		Coyote Creek
City of Mountain View	7.1	7,950	0		San Francisco Bay
Mountain View Sanitary District	0.6	670	0		Carquinez Strait
Napa Sanitation District	6.7	7,500	0		Napa River
North San Mateo County Sanitation District	3.9	4,370	0		Pacific Ocean
Oro Loma Sanitary District	14.2	15,900	0		San Francisco Bay
City of Pacifica					
Linda Mar Plant	1.3	1,460	0		Pacific Ocean
Sharp Park Plant	1.0	1,120	0		Pacific Ocean
City of Palo Alto	13.0	14,560	50	Fire Control	San Francisco Bay

*Estimated

TABLE F-1 (Continued)

QUANTITY OF WASTE WATER DISCHARGED AND REUSED

CENTRAL COASTAL AREA

1969 WATER YEAR

Discharger	Average Discharge Rate (Mgd)	Volume Discharged (AF)	Portion Reused (AF)	Type of Reuse	Place of Disposal For Waste Water Not Reused
City of Petaluma	2.7	3,020	0		Petaluma River
City of Pinole	0.9	1,010	0		San Pablo Bay
City of Pittsburg					
Camp Stoneman Plant	0.6	670	0		New York Slough
Montezuma Plant	1.3	1,460	0		New York Slough
City of Pleasanton	0.9	1,010	1,010	Irrigation	
City of Redwood City	7.6	8,510	0		San Francisco Bay
Richardson Bay Sanitary District	0.2	220	0		Raccoon Strait
City of Richmond	10.2	11,420	0		San Francisco Bay
Rodeo Sanitary District	0.7	780	0		San Pablo Bay
Cities of San Carlos-Belmont	3.9	4,370	0		San Francisco Bay
San Francisco International Airport	0.8	900	0		San Francisco Bay
City and County of San Francisco					
McQueen Plant	1.0	1,120	1,120	Landscape Irrigation	
North Point Plant	66.4	74,370	0		San Francisco Bay
Richmond-Sunset Plant	21.8	24,420	0		Pacific Ocean
Southeast Plant	17.8	19,940	0		San Francisco Bay
City of San Jose	72.9	81,650	0		San Francisco Bay
City of San Leandro					
Domestic Plant	4.4	4,930	0		San Francisco Bay
Industrial Plant	4.3	4,820	0		San Francisco Bay
City of San Mateo	10.8	12,100	0		San Francisco Bay
San Pablo Sanitary District	7.3	8,180	0		San Pablo Bay
San Rafael Sanitation District	2.9	3,250	0		San Francisco Bay
Sausalito-Marín City Sanitary District	1.9	2,130	0		San Francisco Bay
Shell Chemical Company, Pittsburg Plant	12	13,440	0		Suisun Bay
Sonoma Valley County Sanitation District	2.6	2,910	0		Schell Slough
Cities of South San Francisco-San Bruno	10.2	11,420	0		San Francisco Bay
Stege Sanitary District	4.3	4,820	0		San Francisco Bay
City of Sunnyvale	12.9	14,450	0		San Francisco Bay
Travis Air Force Base	1.7	1,900	1,250	Irrigation	Union Creek
Treasure Island, U. S. N.	1.1	1,230	0		San Francisco Bay
Union Sanitary District					
Newark Plant No. 1	4.8	5,380	0		San Francisco Bay
Irvington Plant No. 2	4.8	5,380	0		San Francisco Bay
Alvarado Plant No. 3	1.8	2,020	0		San Francisco Bay
Vallejo Sanitation and Flood Control District	6.9	7,730	0		Carquinez Strait
Valley Community Services District	2.2	2,460	0		Alamo Canal
Yountville Veterans Home	0.2	220	40	Irrigation	Napa River
TOTAL	566.3	634,190	6,020		

TABLE F-2

ANALYSES OF WASTE WATER

Abbreviations

BOD	Biological oxygen demand
CaCO ₃	Calcium carbonate
MBAS	Methylene blue active substances are the measure of detergents ABS and LAS
Mgd	Million gallons per day
mg/l	Milligrams per liter
ml/l	Milliliters per liter
NC	Noncarbonate hardness
NH ₃	Ammonia
NH ₃ + ORG	Ammonia plus organic nitrogen
NO ₃	Nitrate (as nitrogen)
NO ₂	Nitrite (as nitrogen)
ORG	Organic nitrogen
TDS	Gravimetric determination of total dissolved solids in milligrams per liter

TABLE F-2
ANALYSES OF WASTE WATER
PART I

Source	Date Time (PST)	Type of Sample	Flow in mgd	pH Field Lab	Specific conduc- tance (micro- mhos at 25°C)	Mineral constituents milligrams per liter													T.D.S. in mg/l	Hardness as CaCO ₃ in mg/l		Per- cent Sodi- um	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Ammonium (NH ₄)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Boron (B)	Fluoride (F)	Silica (SiO ₂)		Total	N		C
CENTRAL CONTRA COSTA SANITARY DISTRICT (Activated Sludge)	6-27-69 0800	24-Hour Composite	1.1	7.2 6.4	1000	26 1.30	24 1.94	118 5.13	9 0.23	0	156 2.56	74 1.54	154 4.34	43 0.69	0.6			580	162	34	60		
CENTRAL CONTRA COSTA SANITARY DISTRICT (Primary)	6-27-69 0800	24-Hour Composite	24.2	7.3 7.2	1030	22 1.10	20 1.62	116 5.05	11 0.38	0	216 3.54	74 1.54	144 4.06	0.2 0.00	0.0			540	136	0	63		
CONTRA COSTA SANITARY DISTRICT NO. 3	6-25-69 0800	24-Hour Composite	1.02	8.0 7.0	1040	28 1.40	27 2.24	83 3.61	11 0.28	0	342 5.60	84 1.75	85 2.40	0.3 0.00	0.9			509	182	0	48		
CONTRA COSTA SANITARY DISTRICT NO. 7A	7-2-69 0900	24-Hour Composite	0.85	7.2 7.0	1590	31 2.54	35 2.85	174 7.57	16 0.41	0	244 4.00	197 4.10	250 7.05	0.2 0.00	2.4			855	270	70	57		
CITY OF CONCORD	6-27-69 1000	24-Hour Composite	4.83	8.5 6.7	1110	44 2.20	34 2.81	115 5.00	10 0.26	0	322 5.28	128 2.62	124 3.50	2.4 0.09	0.9			635	251	0	49		
CROCKETT-VALONA SANITARY DISTRICT	6-26-69 1000	24-Hour Composite	0.26	7.1 7.2	1340	42 2.10	30 2.50	188 7.31	15 0.38	0	289 4.74	98 2.04	224 6.32	0.2 0.00	0.9			754	230	0	59		
EAST BAY MUNICIPAL UTILITY DISTRICT 1/	10- -68	Monthly Average	75.9	6.6		27.1	18.9	250	46.2				80	377				147					
	11- -68	Monthly Average	75.2	6.7		40.7	16.6						90	436				121					
	12- -68	Monthly Average	82.4	6.8		36.4	16.3							200				159					
	1- -69	Monthly Average	113.3	6.8		29.8	13.2						72	128				130					
	2- -69	Monthly Average	130.5	6.9																			
	3- -69	Monthly Average	86.1	6.8		25.6	11.7								178			113					
	4- -69	Monthly Average	82.2	6.8		27.5	8.4						110	340				104					
	5- -69	Monthly Average	73.2	6.8		26.0	12.0						120	212				112					
	6- -69	Monthly Average	73.2	6.7																			
	7- -69	Monthly Average	77.1	6.4		24	15								251			122					
CITY OF LIVERMORE 2/	8- -69	Monthly Average	81.6	6.4		23	15											122					
	9- -69	Monthly Average	79.4	6.2		25	13											116					
	10- -68	Monthly Average	2.9	7.6	1158	42	29	126	7.0	0.44	0	17		235	1.4	0.30		841			54		
	11- -68	Monthly Average	2.5	6.6	1000													790					
	12- -68	Monthly Average	3.1	6.9	1148													755					
	1- -69	Monthly Average	3.4	7.3	1013	43	29	158	13	6.1	0	51		227	1.6	2.1		783			57		
	2- -69	Monthly Average	4.1	7.4	960	50	18	136	7	1.4	0	56		186	1.5	4.1		773			58		
	3- -69	Monthly Average	3.8	7.6	1143	45	34	174	14.5	0.41	0	45		236	1.8	6.2		939			58		
	4- -69	Monthly Average	3.6	7.1	1225	64	22	169	7.3	0.13	0	31		256	2.1	0.5		840			59		
	5- -69	Monthly Average	3.1	7.1	1165	36	35	159	6.8	0.43	0	58		218	1.6	0.3		778			59		
CITY OF PINOLE	6-25-69 1130	24-Hour Composite	0.7	8.0 6.9	747	26 1.30	13 1.06	71 3.09	12 0.31	0	243 3.88	86 1.79	48 1.35	0.2 0.00	0.7			417	118	0	54		
	7-2-69 1300	24-Hour Composite	1.7	6.8 6.4	1220	49 2.44	26 1.94	150 6.52	15 0.38	0	136 2.23	93 1.66	218 3.07	0.2 0.00	2.9			797	219	107	58		
	7-1-69 0900	24-Hour Composite	0.9	8.1 6.9	1090	47 2.34	39 3.19	157 6.83	14 0.36	0	523 8.57	67 1.39	100 2.82	5.0 0.08	0.7			655	277	0	54		
	6-24-69 1500	24-Hour Composite	5.5	8.0 6.5	1770	35 1.75	20 1.63	178 7.74	10 0.26	0	326 5.34	238 4.96	224 6.32	0.4 0.01	0.6			947	169	0	68		
RODEO SANITARY DISTRICT	6-26-69 0900	24-Hour Composite	0.6	7.2 6.8	1890	52 2.59	48 3.92	244 10.61	14 0.36	0	318 5.21	123 2.56	371 10.46	0.2 0.00	0.3			1040	326	65	61		
SAN PABLO SANITARY DISTRICT	6-24-69 1130	24-Hour Composite	6.2	8.1 6.7	1030	17 0.85	9.6 0.79	168 7.31	15 0.38	0	205 3.36	135 2.81	126 3.55	0.2 0.00	0.4			601	82	0	78		
VALLEY COMMUNITY SERVICES DISTRICT	6-30-69 1700	24-Hour Composite	2.0	8.1 7.3	1700	47 2.34	102 8.35	126 5.48	8 0.20	0	544 8.95	219 4.56	170 4.80	12 0.19	0.4			818	535	89	33		

1/ All analyses reported by discharger.
2/ All analyses reported by discharger except 7-2-69 24-hour composite.

TABLE F-2
ANALYSES OF WASTE WATER
PART 2

Source	Date Time P.S.T.	Type of sample	Flow in mgd	Heavy Metals in mg/l								Organics in mg/l				Nutrients in mg/l							
				Alumi- num (Al)	Ar- senic (As)	Chrami- um (Hex) (Cr+6)	Copper (Cu)	Lead (Pb)	Manga- nese (Mn)	Zinc (Zn)	Total iron (Fe)	Deter- gents (mbas)	Grease and oil	Phe- nols	BOD (5 day)	Nitrogen Series			Phosphate				
																(NH ₃)	(NO ₂)	(NO ₃)	ORG	(NH ₃) + ORG	Ortho (PO ₄)	Total	
CENTRAL CONTRA COSTA SANITARY DISTRICT (Activated Sludge)	6-27-69 0800	24-Hour Composite	1.1										0.1					9.7	12	12			
CENTRAL CONTRA COSTA SANITARY DISTRICT (Primary)	6-27-69 0800	24-Hour Composite	24.2										5.8					0.0	25	11			
CONTRA COSTA SANITARY DISTRICT NO. 3	6-25-69 0800	24-Hour Composite	1.02										8.4					0.1	29	17			
CONTRA COSTA SANITARY DISTRICT NO. 7A	7- 2-69 0900	24-Hour Composite	0.85										10.0					0.0	41	4.3			
CITY OF CONCORD	6-27-69 1000	24-Hour Composite	4.83										0.4					1.2	21	11			
CROCKETT-VALONA SANITARY DISTRICT	6-26-69 1000	24-Hour Composite	0.26										6.1					0.0	26	11			
EAST BAY MUNICIPAL UTILITY DISTRICT 1/	10- -68	Monthly Average	75.9	0.5		0.0							2.8	36	<0.1	176	21.2	0.11	0.85		22		
	11- -68	Monthly Average	75.2	0.2		0.2							5.0	104	<0.1	153	18.4	0.15	1.20		30		
	12- -68	Monthly Average	82.4	3.9		0.0							1.4	27	0.0	179	14.7		2.50		22		
	1- -69	Monthly Average	113.3	0.6		0.0							4.2	38	0.0	145	2.8	0.35	3.00		4		
	2- -69	Monthly Average	130.5											39			137						
	3- -69	Monthly Average	86.1											42			150	7.4		1.30			
	4- -69	Monthly Average	82.2											49	0.0	149	6.3	0.22	1.00				
	5- -69	Monthly Average	73.2											40			147	8.6	0.14				
	6- -69	Monthly Average	73.2														131	6.5					
	7- -69	Monthly Average	77.1											26			140	6.8		1.5			
CITY OF LIVERMORE 2/	8- -69	Monthly Average	81.6										33	<0.1	266						32		
	9- -69	Monthly Average	79.4										32	<0.1	284								
	10- -68	Monthly Average	2.9										0.26	0.28		3.1	0.12	0.03	26.0	1.69		63	
	11- -68	Monthly Average	2.5										0.21	0.31		8.1							
	12- -68	Monthly Average	3.1										0.30	0.41		3.1	0.23	0.01	11.0	0.63			
	1- -69	Monthly Average	3.4										0.25	0.55		13.5	3.7	0.13	12.4	2.93		46	
	2- -69	Monthly Average	4.1										0.09	0.35		7.0	3.2	0.01	19.0	2.58		42	
	3- -69	Monthly Average	3.8		0.001 3/	0.03 3/			0.03 3/					0.27	0.20		5.5	0.11	0.01	26.0	0.85		68
	4- -69	Monthly Average	3.6											0.15	0.64		6.1	0.03	0.004	25.3	2.73		44
	5- -69	Monthly Average	3.1											0.16	0.19		3.1	0.12	0.001	24.4	0.09		48
CITY OF PINOLE	6-24-69 1500	24-Hour Composite	5.5										6.5					0.1	58	5.6			
	7- 2-69 1300	24-Hour Composite	1.7										9.0					0.0	20	6.3			
	7- 1-69 0900	24-Hour Composite	0.9										2.5					1.1	36	10			
	6-24-69 1500	24-Hour Composite	5.5										6.5					0.1	58	5.6			
	6-26-69 0900	24-Hour Composite	0.6										7.9					0.0	28	10			
SAN FABLO SANITARY DISTRICT	6-24-69 1130	24-Hour Composite	6.2										10					0.0	32	28			
VALLEY COMMUNITY SERVICES DISTRICT	6-30-69 1700	24-Hour Composite	2.0										0.2					2.7	7.0	11			

1/ All analyses reported by discharger.
2/ All analyses reported by discharger except 7-2-69 24-hour composite.
3/ Six-month preserved composite, October 1968 through March 1969.
4/ Six-month preserved composite, April 1969 through September 1969.

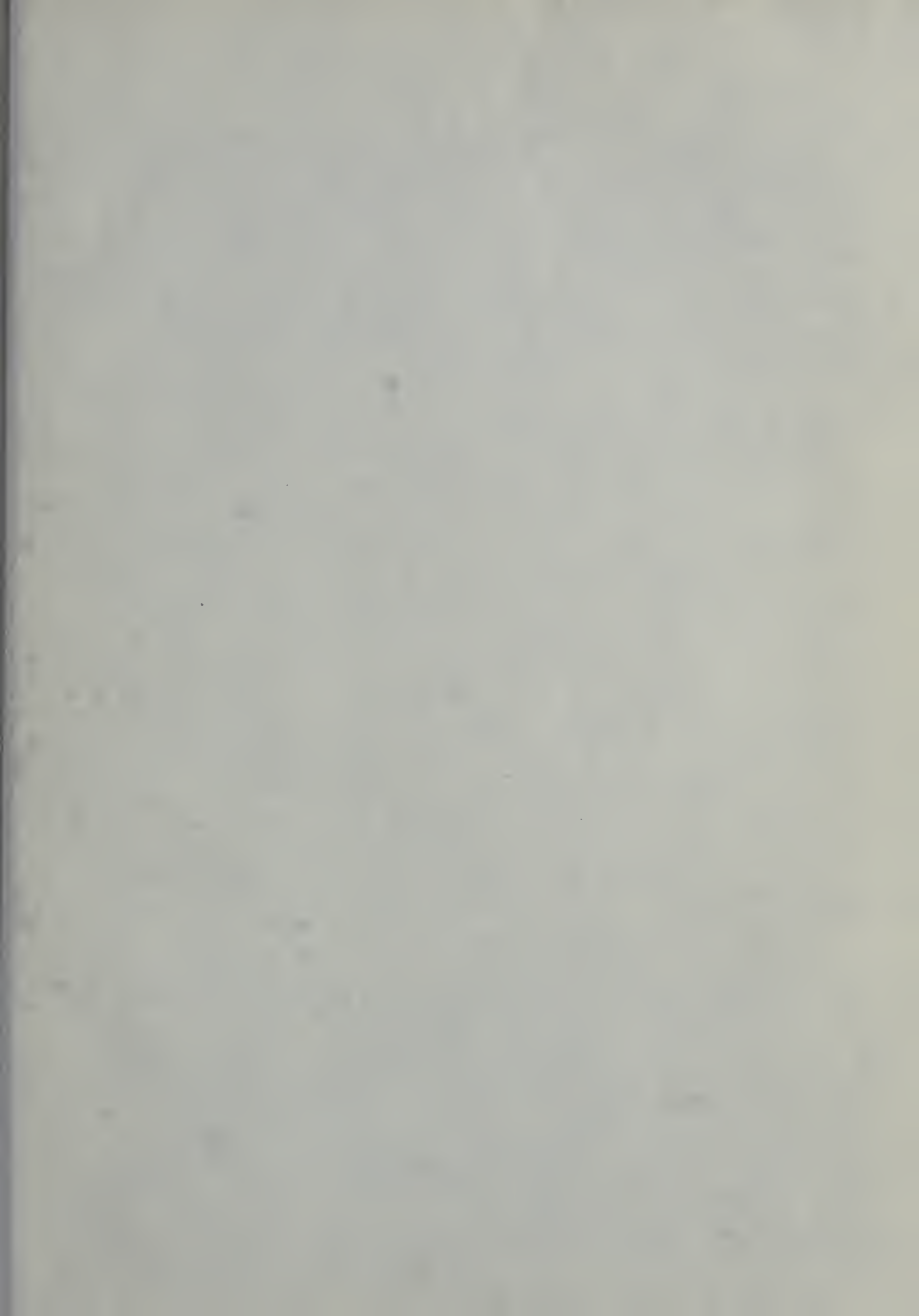
TABLE F-2
ANALYSES OF WASTE WATER
PART 3

Source	Date Time P.S.T.	Type of sample	Flow in mgd	Suspended solids in mg/l	Volatile suspended solids in mg/l	Settleable solids in ml/l	Remarks	
EAST BAY MUNICIPAL UTILITY DISTRICT <u>1/</u>	10- -68	Monthly Average	75.9	98 <u>3/</u>		0.2 <u>3/</u>		
	11- -68	Monthly Average	75.2	103		0.4		
	12- -68	Monthly Average	82.4	110		0.2		
	1- -69	Monthly Average	113.3	134		0.3		
	2- -69	Monthly Average	130.5	121		0.4		
	3- -69	Monthly Average	86.1	115		1.0		
	4- -69	Monthly Average	82.2	121		0.5		
	5- -69	Monthly Average	73.2	117		0.2		
	6- -69	Monthly Average	73.2	131		0.1		
	7- -69	Monthly Average	77.1	111		0.3		
	8- -69	Monthly Average	81.6	139		0.3		
	9- -69	Monthly Average	79.4	142		0.3		
	CITY OF LIVERMORE <u>2/</u>	10- -68	Monthly Average	2.9	11	10.3	< 0.1	
11- -68		Monthly Average	2.5	14	9.3	< 0.1		
12- -68		Monthly Average	3.1	8	7.8	< 0.1		
1- -69		Monthly Average	3.4	19	14	< 0.1		
2- -69		Monthly Average	4.1	17	10	< 0.1		
3- -69		Monthly Average	3.8	12	7	< 0.1		
4- -69		Monthly Average	3.6	13	9	< 0.1		
5- -69		Monthly Average	3.1	6	6	< 0.1		
6- -69		Monthly Average	3.5	6	2	< 0.1		
7- -69		Monthly Average	3.8	4	2	< 0.1		
<u>7- 2-69</u> 0000		24-Hour Composite	3.9					
8- -69		Monthly Average	3.9	5	3	< 0.1		
9- -69		Monthly Average	3.9	5	5	< 0.1		

1/ All analyses reported by discharger.
2/ All analyses reported by discharger except 7-2-69 24-hour composite.
3/ Contains digested sludge.

No.	Name	Age	Sex	Religion	Remarks
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

88764



THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

BOOKS REQUESTED BY ANOTHER BORROWER
ARE SUBJECT TO RECALL AFTER ONE WEEK.
RENEWED BOOKS ARE SUBJECT TO
IMMEDIATE RECALL

APR 4 1977
APR 29 REC'D

JUN 17 1977

JUN 13 REC'D

FEB 5 1979

JAN 29 REC'D

JUL 4 1985

RECEIVED

JUN 25 1985

PHYSICS LIBRARY

JUN 30 1988

RECEIVED

MAR 7 1988

PHYSICS LIBRARY

JUN 16 1989

JUN 09 1989 REC'D

RECEIVED

JUN 21 1989

PHYSICS LIBRARY

NOV

LIBRARY, UNIVERSITY OF CALIFORNIA, DAVIS

Book Slip-Series 458



3 1175 00478 4636

TC
824
C2
A2

California. Dept. of Water Resources.
Bulletin.

no. 130:69
v. 1-3
appx. A-F

PHYSICAL
SCIENCES
LIBRARY

